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# The Far Eastern Review

ENGINEERING + FINANCE + COMMERCE  
THE PIONEER IN ITS FIELD

*A Monthly Review of Far Eastern Trade, Finance and Engineering, Dedicated to the Industrial Development and Advancement of Trade in Far Eastern Countries.*

HEAD OFFICE: 5 JINKEE ROAD - - - - - SHANGHAI, CHINA.

George Bronson Rea, *Publisher*

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# FAR EASTERN REVIEW

THE PIONEER IN ITS FIELD

TOKYO

SHANGHAI

MANILA

In this Number:

WILL AMERICAN ELECTRICAL MANUFACTURERS PAY \$1,000,000,000.00 FOR BOLSHEVIK ANTI-JAPANESE AGITATION?

SOME EYE-OPENING FACTS AND FIGURES

By Geo. Bronson Rea

THE TELEPHONE IN CHINA

Systems in Operation Described and Illustrated

IN JUSTICE TO CHINA

Mr. Chow Tzu-chi and the Financial Consortium

THE FILIPINOS NEED, AND WANT FORBES

John W. Hausserman Sums Up the Philippine Situation

Mr. LAMONT DEFENDS JAPAN

PRESIDENT-ELECT HARDING AND FAR EASTERN PROBLEMS

New Opportunities for Iron and Steel, Railway, Electrical and All Engineering Lines

RAITEI NO TAKI,

Scenery of Raitei at Shiohara, one of the Numerous Famous Scenic Spots of Japan. Future Sources of Power and Wealth

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COMMERCE



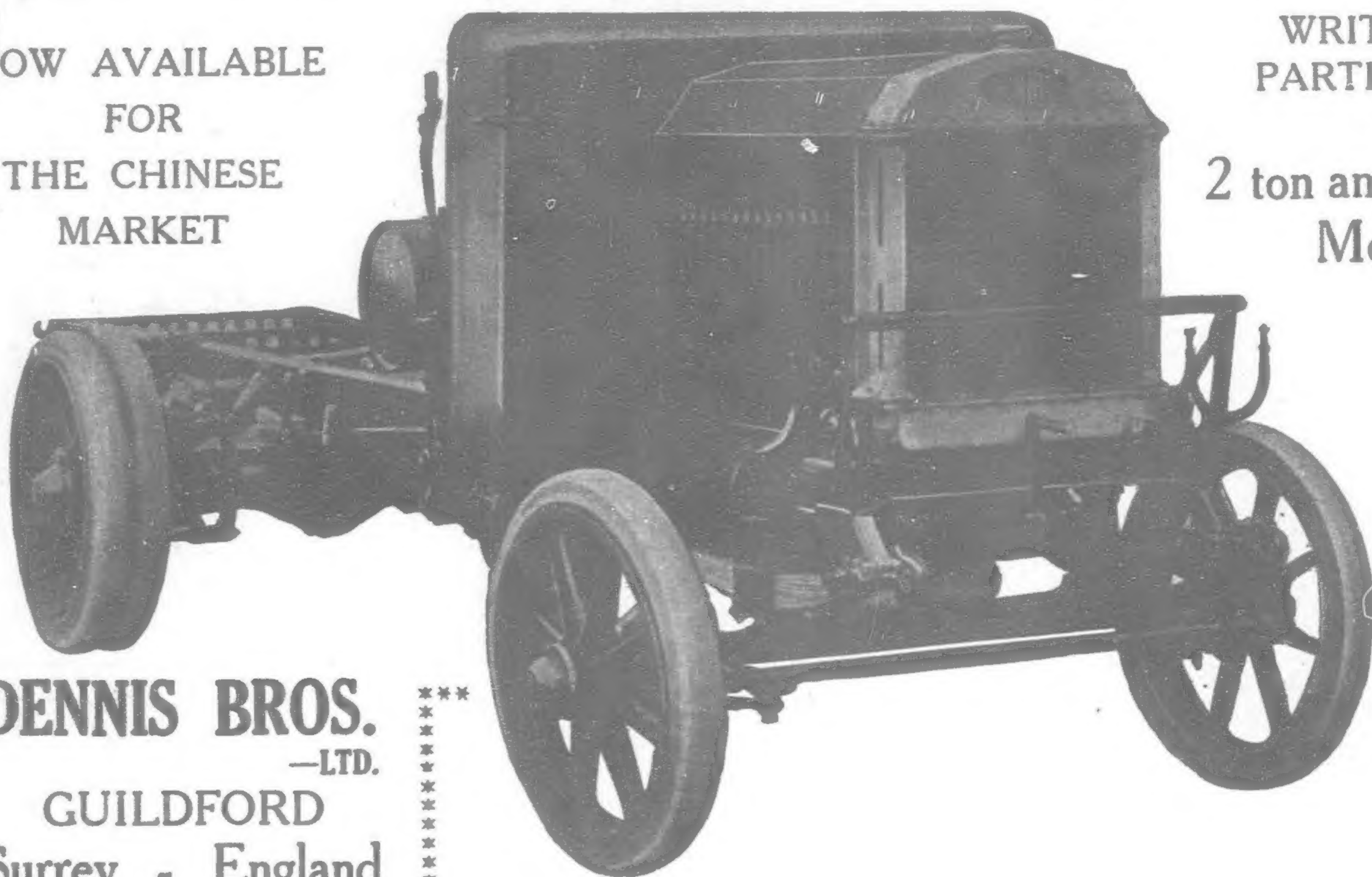
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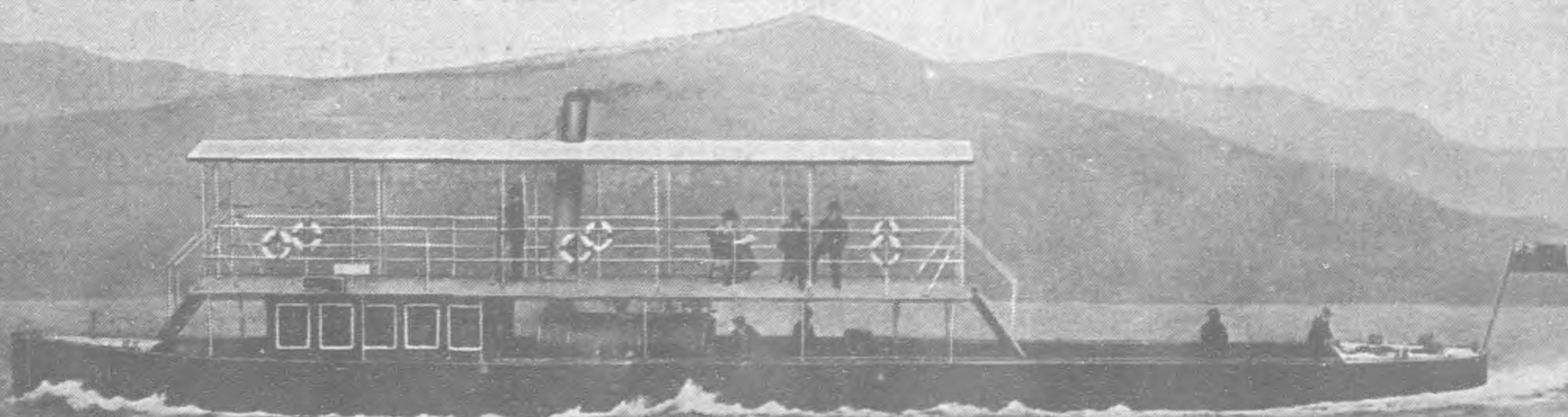


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# The Far Eastern Review

ENGINEERING

FINANCE

COMMERCE

VOL. XVI

SHANGHAI, DECEMBER, 1920

No. 12

## Risking the Loss of a Billion Dollar Electrical Opportunity

Hard Facts that Prove American Manufacturers May be Called Upon to Pay  
in Heavy Business Losses for Anti-Japanese Agitation in China and America

German Brains May Direct Japanese Electrical and Other Industrial Developments

*By George Bronson Rea*

**N**OWHERE in the world has there been established and demonstrated by successful working along the lines of international business, a partnership to compare with that evidenced by the wonderful development of Japanese electric resources through the utilization of American inventiveness and manufacturing efficiency. Nowhere else in the world is there such a vast and immediate market awaiting American manufacturers of electric power as that now offered by Japan and her dependencies. The greatest open market in the

transmission lines, etc., may be purchased in America. It is the desire of the Japanese bankers, business men and officials that this business should go to the American manufacturer. As Japan's financial market may be unable to carry the load of financing these huge new industries, in addition to its many other commitments or contingent responsibilities, the hope is expressed in Japan that past successful and satisfactory American-Japanese co-operation will now be reciprocated in part by American participation in the financing of these projects. That the business thus laid at the door of

HYDRO-ELECTRIC PLANTS, TO THE ESTIMATED VALUE OF CONSIDERABLY MORE THAN A BILLION DOLLARS, AWAIT DEVELOPMENT IN JAPAN. JAPAN PREFERS AMERICAN MATERIAL AND AMERICAN CO-OPERATION.

ANTI-JAPANESE AGITATION BY AMERICANS IN CHINA AND IN THE UNITED STATES HAS SO GRAVELY AFFRONTED THE PRIDE AND EXHAUSTED THE PATIENCE OF POWERFUL JAPANESE, HITHERTO WARM FRIENDS OF AMERICA, THAT THEIR INFLUENTIAL YORODZU CHOHO—DURING THE WAR THE LEADING PRO-ALLIED PAPER IN JAPAN—NOW SUGGESTS THAT JAPAN FAVORABLY RESPOND TO DR. SOLF'S SUGGESTION "THAT GERMANY IS IN A POSITION TO SUPPLY JAPAN WITH SCIENTIFIC ABILITY." SAYS THE YORODZU CHOHO: "IF GERMANY CAN SUPPLY OUR WANTS, WHY SHOULD WE HESITATE TO SHAKE HANDS WITH HER?"

THE WAR IS OVER. ONLY SHORT-SIGHTED, IGNORANT OR VICIOUS PEOPLE PERPETUATE, FOR SELFISH OR SINISTER PURPOSES, INTERNATIONAL BITTERNESSES. GERMANY DESERVES, DESIRES AND IS CERTAIN TO SECURE IMMEDIATE RE-ADMISSION TO THE FAMILY OF NATIONS. LORD ROBERT CECIL, CHIEF BRITISH ARCHITECT OF THE LEAGUE OF NATIONS, INSISTS UPON THE IMMEDIATE ADMISSION OF GERMANY.

ARE AMERICAN BUSINESS MEN SO BLIND AS TO PERMIT THEIR AGENTS OR AUXILIARIES IN CHINA TO BUILD UP AGAINST THEM A STONE WALL OF PREJUDICE IN JAPAN? WAKE UP, MR. COFFIN! GET ON THE JOB, WESTINGHOUSE! DO YOUR PART IN PUTTING A STOP TO THIS IMMORAL AND UNBUSINESSLIKE CONSPIRACY WHICH IS STABBING YOUR OWN BUSINESS IN THE BACK!

world to-day for high-grade electric apparatus lies in the stupendous project of the Japanese authorities for the electrification of the imperial government railways and important schemes for hydro-electric developments throughout the empire. Alongside the estimated cost of these plans (\$1,000,000,000) Japan's army and navy appropriations sink into insignificance. A large percentage of the material and apparatus for these power houses, motors,

financial and industrial America is lucrative and otherwise attractive there can be no doubt. The Japanese promoters are ready to offer bonds paying 10 and 12 per cent. on the investments, which are both substantial and stable. International financial conditions at this moment favor America. New capital must be found for industrial opportunities, and the demands upon Japan's financial resources, consequent upon her participation in the new Chinese



financial consortium, must operate to retard for several years the execution of the great water-power enterprises so urgently needed and so ardently desired.

Japan has taken upon her shoulders a huge burden in entering into partnership with America to finance China, with the obligation of carrying Great Britain, and France until they are in a more favorable financial position. Beyond any question, the prospects involved by this obligation have set back the wheels of Japan's own development. The Japanese hope that the friendly relationship thus created with America will not only dispel many of the erroneous conceptions about Japan, but that it will in due time bring home to the American investor the attractiveness and importance of profitable opportunities awaiting him in the development of Japan's resources. The great electric industry now firmly established in Japan has been created by friendly co-operation between American and Japanese manufacturers, but projected develop-

and experienced diplomat at Tokyo, suggests the combination of German brains and Japanese opportunities and resources. The *Yorodzu Choho*, the leading Japanese pro-Allied newspaper, and other important Japanese interests, are beginning to take these German suggestions seriously. Why should Japan deal with her calumniators and spurn the friendly offers of those who at least profess friendship? The story of Japanese electrical opportunities brings home some hard facts to our American business men who will no doubt ask themselves why they should cast away lucrative opportunities for no seeming advantage.

"White coal" the pleasing description given to water-power, is not a new experiment in Japan. It has been there and utilized for centuries in a primitive way. Modern hydro-electric plants are now seen perched on the hill-sides draining the maximum amount of power out of the many small but swift rivers. Over 1,000,000 kilowatts are furnished from this source for railways, tramways,



TYPE OF JAPANESE POWER PLANT

Generating Room of the Kyushu Electric Light and Traction Co., Ltd., Equipped with G.E., Steam Turbine Sets.

ments are so vast that the Japanese electrical industry cannot hope to monopolise this business.

Just at this juncture, when a huge and immensely profitable Japanese opportunity comes knocking at the doors of the electrical manufactories of the United States, the Japanese people are being insulted, affronted and stung to resentment by what Mr. John Foord, secretary of the American Asiatic Society and special correspondent of the *New York Times*, very properly characterises as "criminal propaganda." It is in this sense a criminal propaganda that aims to disrupt the friendly relations of Japan and America—rearing up vast bulwarks of suspicion and enmity upon a flimsy foundation of certain undoubtedly real grievances, although for the greater part a morass concocted out of disordered imagination, rampant and cowardly, calumny and blatant ignorance.

While a comparatively few Americans are acting so as to spurn Japan's proffers of friendly co-operation, Dr. Solf, Germany's skilful

industries, and government work. Even when this amount of energy is enormously increased as planned, it will not supply, according to the figures of Mr. Kyuchi Hasegawa, chief of the Rivers Section of the Home Department, enough power to dispense with coal for power purposes.

The official records of hydro-electric plants shows the extent to which the industry has developed. It is

Public Service Corporations .....	579
State Railway Service .....	41
Private and Public Service .....	48
Private Service .....	2,300
Government Service .....	135

Total Plants in Operation ..... 3,103

Fuji's white peak furnished the streams for the first ventures in Japan's water development. Most of the power from the upper



portions of the Fuji-kawa is brought to Tokyo. One of the corporations which has several plants there is capitalized for \$60,000,000. The subsequent Fuji and Lake Suwa developments are planned to supply Tokyo and Yokohama. Tokyo and Kanagawa prefectures where the two cities are located have few streams suitable for power development. Sagami and Katsura (upper part of Sagami River) rivers, near Yokohama and the Lake Inawashiro district, 180 miles from Tokyo, with the Akano River are the two big future sources of supply for the two cities.

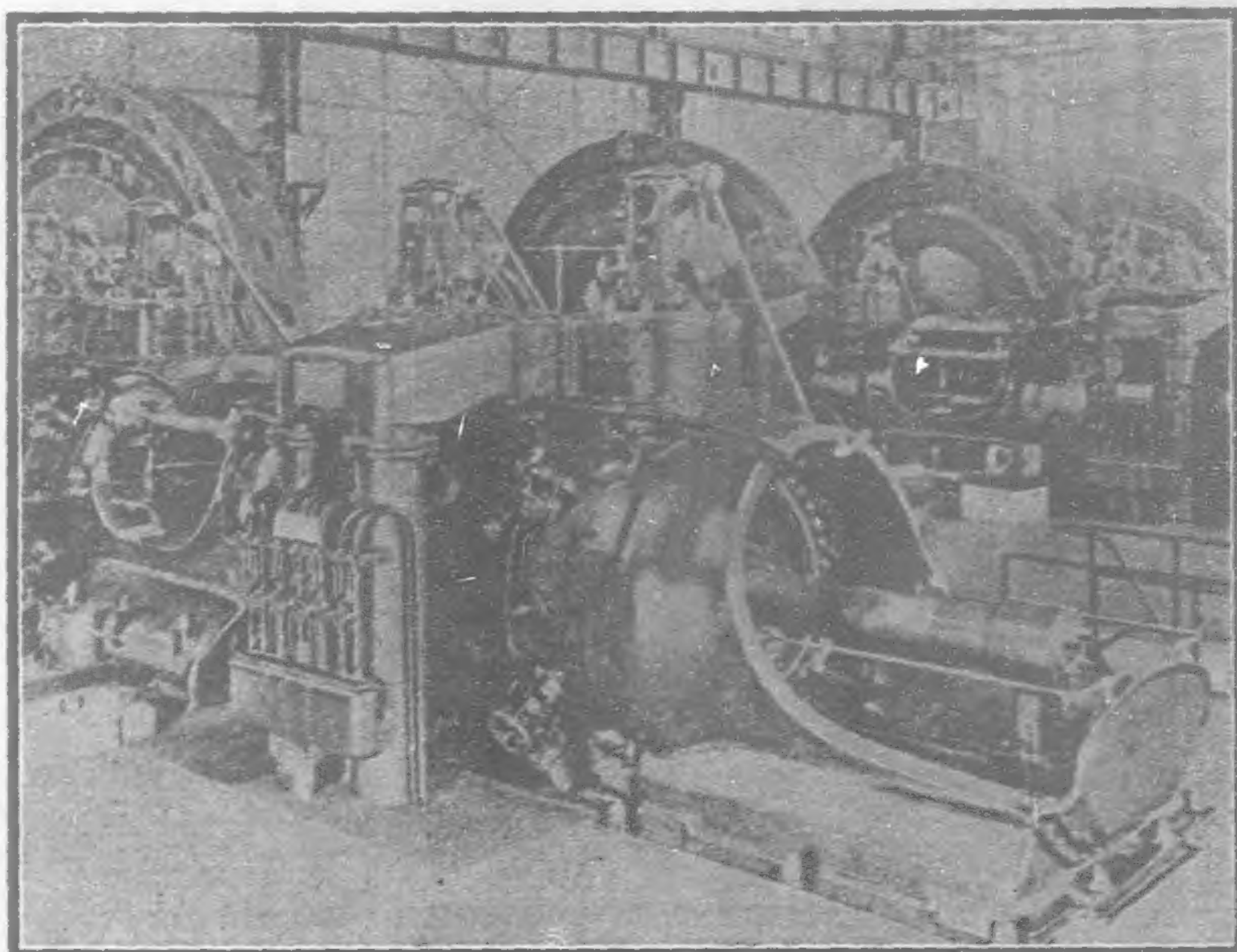
The new railway plants are planned for the upper portions of the Shinano river with a capacity of 204,500 horse-power. At present the Tokyo street car system gets its current from power houses on the Kinu river, near Nikko, one of the least successful ventures on account of the shortage of water in the winter. Another extensive development is around Nagoya and Gifu on the Nagara, Hida and Kiso rivers. North of there, on the opposite side of the main island of Hondo, is a big series of plants on the Kudzuruyu, Sho, Jindzu, Jaganji and Kurobe rivers. Dr. Jokichi Takamine, the head of the Takamine Chemical Company in New York, is largely interested in these. Kyoto and the industrial centres of Osaka and Kobe are supplied from Lake Biwa and the Uji (upper portion of Yedo river). Nagasaki depends on coal but the industrial towns around Moji on Kyushu island have extensive water power plants on the Chikugo, Oita and Ono rivers. Several big chemical plants are also developing the Gokase, Mimi and Oyodo rivers. On the island of Hokkaido hydro-electric power is used chiefly for the paper and pulp mills.

The following table will give some idea of the number of plants in operation and those projected:—

Island	In Operation		Planned		Total	
	No.	H.P.	No.	H.P.	No.	H.P.
Hokkaido ...	15	57,140	41	79,667	56	136,807
Hondo ...	426	736,376	717	2,090,051	1,143	2,853,427
Kyushu ...	56	138,297	71	236,377	127	374,674
Shikoku ...	28	32,693	34	36,774	62	69,467
Grand Total ...	525	991,506	863	2,442,869	1,388	3,434,375

The official figures given in the last government report, Dec. 31, 1918, show the licenses which have been granted, but not the number of plants under each license, for the use of rivers in the four largest of Japan's islands. They are:

Prefecture	Operating		Planned		Total	
	No.	H.P.	No.	H.P.	No.	H.P.
HOKKAIDO ...	15	57,140	41	79,667	56	136,807
ISLAND OF HONDO						
Aomori ...	6	3,048	6	7,794	12	10,842
Iwate... ..	13	9,141	27	48,674	40	57,788
Akita ... ..	22	24,736	12	17,006	34	41,742
Miyagi ... ..	10	8,402	24	41,353	34	49,755
Yamagata... ..	12	16,712	9	13,308	21	30,020
Fukushima ...	32	130,767	50	152,613	82	283,380
Niigata ... ..	24	21,018	28	117,559	52	138,577
Tochigi ... ..	23	99,070	30	78,401	53	177,471
Nagano ... ..	27	30,060	94	408,231	121	438,291
Toyama ... ..	13	15,833	23	52,946	36	68,779
Ishikawa ... ..	9	8,766	22	60,351	31	69,117
Fukui ... ..	12	5,843	9	35,242	21	41,085
Saitama ... ..	2	2,181	7	19,613	9	21,794
Ibaraki ... ..	7	12,195	13	77,947	20	90,142
Gumma ... ..	18	26,299	82	290,859	100	317,158
Chiba... ..	2	114	2	153	4	267
Tokyo ... ..	1	65	1	275	2	340
Kanagawa ... ..	7	19,906	26	55,383	33	75,289
Yamanashi ...	14	125,028	19	109,032	33	234,060
Shidzuoka... ..	34	37,485	49	152,010	83	199,247
Gifu ... ..	34	32,853	49	74,394	83	107,247
Aichi ... ..	15	10,796	11	17,804	26	18,600
Shiga ... ..	6	6,875	4	4,143	10	11,018
Miye ... ..	8	2,425	14	8,210	22	10,635
Kyoto ... ..	18	69,064	19	53,291	37	122,355
Osaka ... ..	5	978	4	438	9	1,416
Nara ... ..	6	2,971	17	117,498	23	120,469
Wakayama ... ..	6	5,232	7	6,985	13	12,217
Hyogo ... ..	7	5,738	20	7,121	27	12,859
Tottori ... ..	7	3,180	10	13,870	17	17,050



Yaguchi Power Station

Prefecture	Operating		Planned		Total	
	No.	H.P.	No.	H.P.	No.	H.P.
ISLAND OF HONDO						
Okayama ...	7	13,690	7	22,169	14	35,859
Hiroshima ...	10	7,781	9	19,507	19	20,288
Shimane ... ..	5	3,788	4	2,935	9	6,723
Yamaguchi ...	4	1,336	6	9,963	13	11,299
Total ... ..	426	763,376	717	2,090,051	1,143	2,853,427
ISLAND OF KYUSHU						
Fukuoka ... ..	5	2,712	6	1,112	11	3,824
Saga ... ..	5	18,340	3	2,958	8	21,298
Nagasaki ... ..	2	423	3	143	5	566
Oita ... ..	11	42,981	17	102,648	28	145,629
Kumamoto ... ..	8	46,450	15	38,411	23	84,861
Miyazaki ... ..	10	4,871	10	28,170	20	33,041
Kagoshima ...	15	22,520	17	62,935	32	85,455
Total ... ..	56	138,297	71	236,377	127	374,174
ISLAND OF SHIKOKU						
Tokushima ...	4	8,537	10	14,670	14	23,207
Kagama ... ..	1	516	—	—	1	516
Ehime ... ..	12	18,278	10	10,734	22	29,012
Koshi ... ..	11	5,362	14	11,370	25	16,732
Total ... ..	28	32,506	34	36,774	62	69,467
Grand Total	525	991,506	863	2,442,869	1,388	3,434,375

The licenses are granted by the Minister of Home Affairs. A very, very small tax is charged for the use of the nation's waterways. Individuals or corporations, private enterprises, are chiefly interested and some remarkable fortunes have been built up through this form of national development. Baron Iwasaki, graduate of an American university, and one of the sons to the founder of the great Mitsubishi interests holds many of the Lake Inawashiro grants. The equally important Mitsui interests also hold many grants. Baron Shibusawa, Heizaburo Okawa, Kyohei Makoshi, Soichiro Asano, E. Tajima, T. Fujiyama, Baron K. Den, Baron K. Sumitomo, Rokuro Hara, F. Kuhara, President I. O-oka of the Diet, G. Shi-raishi are some of the largest grantees.

Most of the holders are veiled by corporate names. In this class is Momosuke Fukusawa said to be the wealthiest and one of the least known capitalists of Japan. He is interested in most of the gas or electric light companies in Japan. In the Russo-Japanese war he made an immense fortune in stocks and this has grown steadily ever since. He is a graduate of the Keio University of Tokyo and the Commercial College of New York. From 1881 to 1889 he was on the staff of the Pennsylvania railroad learning corporate organization. He came home to serve a term in the Diet and put into practice the knowledge he gained in America. American methods, American machinery and American materials are the tools with which he and many other captains of Japanese industry started out in life, coupled with their native talent, and transformed the



Land of the Rising Sun into the foremost market for American engineering materials.

Will the American manufacturers continue to profit by this deeply-rooted friendship in the further development of these great hydro-electric projects? It is for them to answer. If they remain silent and refrain from making their voices heard in the proper quarters to put an immediate stop to the conspiracy that has been hatched to create hostilities between the two peoples, the chances are very bright that this profitable connection will be gradually undermined and the business handed over to other nations whose citizens at home and in China are not so deeply concerned about the color of the Japanese skin or his economic and political activities on the mainland. In this connection, the editorial from the *Yorodzu*, published in the editorial columns of this number of THE FAR EASTERN REVIEW, should be carefully read and pondered over. If Americans in China persist in aiding and abetting agitation against Japan and penalizing those who honestly endeavor to clarify the atmosphere, then we may expect that others will gradually step into our shoes and American manufacturers will lose the wonderful trade that has been handed to them on a silver platter by the friendship of those who absorbed their technical knowledge in our country.

### Electric Light, Power and Tramway Companies Organized in Japan

January to August, 1920

Name of Company	Prefecture	Capital Yen (Total for Prefecture)
January		
Nanao Electric Light Co. ... ..	Ishikawa	1,500,000
Washiwa Electric Light Co. ... ..	Ishikawa	
Shiyu Electric Light Co. ... ..	Ishikawa	
Takahama Electric Light Co....	Ishikawa	
Shikatsuno Electric Light Co. ... ..	Akita	
Odate Electric Light Co. ... ..	Akita	1,000,000
Kawauchikawa Electric Light Co. ... ..	Kagoshima	1,000,000
Kushimoto Electric Light Co. ... ..	Kagoshima	
February		
Atsugishi Electric Light Co. ... ..	Hokkaido	2,985,000
Ikeda Electric Light Co. ... ..	Hokkaido	
Yubetsu Electric Light Co. ... ..	Hokkaido	
Honbetsu Electric Light Co. ... ..	Hokkaido	
Kitsaki Electric Light Co. ... ..	Akita	
Futatsui Electric Light Co. ... ..	Akita	122,000
Takasu Electric Light Co. ... ..	Akita	
Kitagen Electric Light Co. ... ..	Kochi	500,000
Takaminami Electric Light Co. ... ..	Kochi	
March		
Hayaka Electric Light Co. ... ..	Hiroshima	19,000,000
Nichiyei Electric Light Co. ... ..		
Kure Electric Light Co. ... ..		
Kamishima Electric Light Co. ... ..		
Bisaku Electric Light Co. ... ..		
Kajima Electric Light Co. ... ..	Okayama	2,000,000
April		
Tokyo Electric Light Co. ... ..	Tokyo	120,000,000
Nippon Dento Electric Light Co. ... ..	Tokyo	
Uyeda Hydro-Electric Co. ... ..	Aichi	1,000,000
Uyeda Electric Light Co. ... ..		
Okazaki Electric Light Co. ... ..		2,100,000
Hekakai Electric Light Co. ... ..		
Tokyo Bay Reclamation Co. ... ..	Tokyo	1,500,000
Tsurumi Electric Light Co. ... ..	Tsurumi	
Yahagi Hydro-Electric Co. ... ..	Aichi	5,000,000
Iwamura Electric Tramway Co. ... ..	Aichi	
Kanazawa Electric Tramway Co. ... ..	Ishikawa	2,470,000
Matsukane Electric Tramway Co. ... ..	Ishikawa	
Teikoku Electric Light Co. ... ..	Kyoto	9,000,000
Miyacho Hydro-Electric Co....	Kyoto	
Kyushu Electric Light Co. ... ..	Kyushu	18,625,000
Hikoshima Electric Light Co. ... ..	Kyushu	
Shima Electric Light Co. ... ..	Kagawa	350,000
Shogu Electric Light Co. ... ..	Kagawa	
May		
Fukushima Electric Light Co. ... ..	Fukushima	5,600,000
O-u Electric Light Co. ... ..	Fukushima	
Chuo Paper Mill ... ..	Nagano	5,000,000
Kiso Industrial Hydro-Electric Co. ... ..	Nagano	
Fuji Paper Mill ... ..		1,000,000
Yokkaichi Paper Mill ... ..		

Name of Company	Prefecture	Capital Yen (Total for Prefecture)
June		
Atsuki Electric Light Co. ... ..		
Fuji Hydro-Electric Co. ... ..		30,000,000
Mimaisaki Electric Tramway Co. ... ..	Shidzuoka	
Nanto Electric Light Co. ... ..	Shidzuoka	300,000
Kimozuko Electric Light Co. ... ..	Kagoshima	
Satsuma Electric Light Co. ... ..	Kagoshima	1,500,000
July		
Akita Electric Light Co. ... ..	Akita	
Gojomoku Electric Light Co.... ..	Akita	1,000,000
Inazawa Electric Power Co. ... ..		1,000,000
Hyogo Electric Tramway Co. ... ..	Hyogo	
Akashi Electric Light Co. ... ..	Hyogo	7,660,000
Higashi Shirakawa Hydro-Electric Co. ... ..		
Asakawa Paper Mill ... ..		200,000
Koma Hydro-Electric Co. ... ..	Fukushima	
Onahama Electric Tramway Co. ... ..	Fukushima	2,000,000
August		
Fuji Hydro-Electric Co. ... ..	Hokkaido	
Miuta Electric Light Co. ... ..	Hokkaido	16,500,000
Tamamagawa Hydro-Electric Co. ... ..	Hokkaido	
Naoyuki Electric Light Co. ... ..		3,000,000
Tomimachi Hydro-Electric Co. ... ..	Miyagi	
Teigi Electric Light Co. ... ..	Miyagi	1,220,000
Teokoku Electric Light Co. ... ..	Hokkaido	
Kasugawa Electric Light Co.... ..	Hokkaido	9,000,000
Niigata Hydro-Electric Co. ... ..	Niigata	
Niigata Electric Light Co. ... ..	Niigata	10,000,000

Since January of this year, 34 amalgamations of electrical enterprises, aggregating Yen 283,407,000 have been effected.

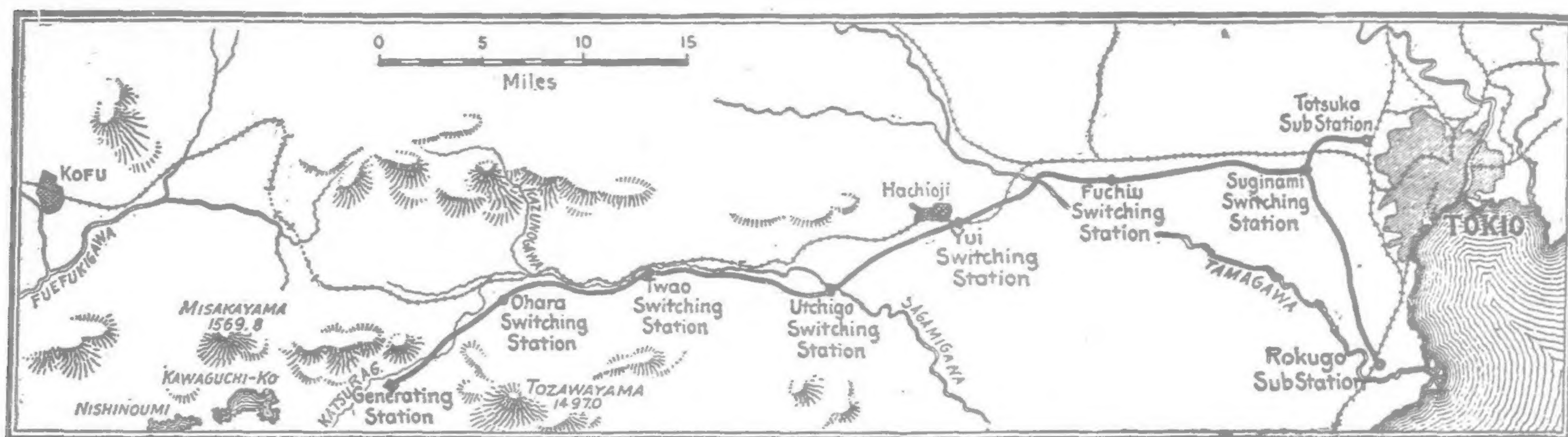
### Japanese Water Power Grants

Name of Company and Individuals	Horse Power	Head	Discharge Quan- tity	Source
Hokkaido Kogyo K. Kaisha ... ..	6,321	148	380	Asami-gawa
Hokkaido Kogyo K. Kaisha ... ..	10,567	232	400	Asami-gawa
Mr. Kyohei Makoshi and others ... ..	3,147	280	100	Kamabetsu-gawa
Mr. Kyohei Makoshi and others ... ..	3,327	74	400	Tokachi-gawa
Mr. Kyohei Makoshi and others ... ..	3,275	94	310	Tokachi-gawa
Hakodate Suidenko K. Kaisha ... ..	4,946	220	200	Orito-gawa
Oji Paper Manufacturing Co. ... ..	16,032	219	650	Shiribetsu-gawa
Oji Paper Manufacturing Co. ... ..	28,325	420	600	Chitose-gawa
Oji Paper Manufacturing Co. ... ..	3,546	64	500	Chitose-gawa
Oji Paper Manufacturing Co. ... ..	4,384	65	400	Chitose-gawa
Oji Paper Manufacturing Co. ... ..	4,325	57	675	Chitose-gawa
Sapporo Suiryoku Denki K.K. ... ..	3,246	1,444	200	Tayohira-gawa
Mitsui Mining Company ... ..	3,086	97	284	Yuhari-gawa
Fuji Paper Manufacturing Co. ... ..	4,370	64	600	Sorachi-gawa
Fuji Paper Manufacturing Co. ... ..	8,863	65	660	Sorachi-gawa
Fuji Paper Manufacturing Co. ... ..	6,818	40	800	Sorachi-gawa
Fuji Paper Manufacturing Co. ... ..	3,147	140	200	Sorachi-gawa
Nippon Denki Seitetsu-jo ... ..	3,947	136	260	Miyako-gawa
Tanaka Mining Co., Ltd. ... ..	3,467	241	128	Akachiba-gawa
Tanaka Mining Co., Ltd. ... ..	3,501	241	128	Akachiba-gawa
Nanbu Denki Kogyo K. Kaisha ... ..	3,125	129	200	Kitakami-gawa
Nanbu Denki Kogyo K. Kaisha ... ..	4,024	179	200	Kitakami-gawa
Iwate Denki Kogyo K. Kaisha ... ..	5,867	87	600	Sarugaishi-gawa
Eoigawa Suiden K. Kaisha ... ..	4,024	155	231	Arao-gawa
Karita Suiryoku K. Kaisha ... ..	8,201	304	240	Shiraishi-gawa
Sennan Denki Kogyo K. K. ... ..	4,046	200	180	Shiraishi-gawa
Koriyama Denki K. K. ... ..	5,093	231	200	Gohyaku-gawa
Koriyama Denki K. K. ... ..	3,035	135	200	Anseki Sosui
Koriyama Denki K. K. ... ..	7,146	289	220	Anseki Sosui
Kuhara Mining Co., Ltd. ... ..	6,676	495	120	Kido-gawa
Kuhara Mining Co., Ltd. ... ..	5,957	265	200	Natsui-gawa
Kuhara Mining Co., Ltd. ... ..	6,609	290	200	Natsui-gawa
Mutsu Denryoku K. K. ... ..	3,777	70	480	Mabuchi-gawa
Aomori Dento K. K. ... ..	4,759	580	73	Komakami-gawa
Fujita Mining Co., Ltd. ... ..	3,035	150	180	Nashiro-gawa
Furukawa Mining Co., Ltd. ... ..	3,541	210	150	Komata-gawa
Mr. T. Yoshika and others ... ..	4,535	269	159	Inabe-gawa
Mr. Fusanosuke Kuhara ... ..	7,280	539	1,120	Ishieka-gawa
Nippon Suiryoku Denki K. K. ... ..	5,180	100	460	Naka-gawa
Nippon Suiryoku Denki K. K. ... ..	25,290	180	1,250	Sarato Reservoir
Nippon Suiryoku Denki K. K. ... ..	19,000	130	1,300	Sarato Reservoir
Nippon Suiryoku Denki K. K. ... ..	22,250	180	1,100	Sarato Reservoir
Tonegawa Suiryoku Denki K. K. ... ..	10,578	314	300	Tone-gawa
Mr. Shuzo O-oka and 25 others ... ..	11,240	500	200	Katashima-gawa
Mr. Shuzo O-oka and 25 others ... ..	4,496	100	400	Katashima-gawa
Tone Hatsuden K. Kaisha ... ..	14,350	520	250	Katashima-gawa
Tone Hatsuden K. Kaisha ... ..	5,665	360	140	Katashima-gawa
Mr. G. Shiraishi and others ... ..	9,863	351	250	Azuma-gawa
Kamakama Suiryoku Denki K. K. ... ..	6,771	753	80	Kuma-gawa
Kanto Denki Kogyo K. K. ... ..	4,309	426	90	Ara-kawa
Musashi Suiden Kab. Kaisha ... ..	4,164	285	136	Ara-kawa
Baron Shibusawa and 2 others ... ..	5,884	349	150	Mitake-gawa



Name of Company and Individuals	Horse Power	Head	Quantity	Source	Name of Company and Individuals	Horse Power	Head	Quantity	Source
Tokyo Electric Light Co., Ltd., ...	11,142	145	684	Sagami-gawa	Taisho Kagaku Kogyo K. K. ...	6,330	1,408	40	Umi-kawa
Sagamigawa Suiryoku Denki K. K. ...	8,902	50	1,600	Sagami-gawa	Mr. Rokuro Hara ...	6,138	369	148	Kotaki-gawa
Katsuragawa Denryoku K. K. ...	23,777	470	450	Katsuragawa	Hokuriku Suiden Kogyo K. K. ...	12,058	596	180	Odokoro-gawa
Katsuragawa Denryoku K. K. ...	23,182	370	550	Katsuragawa	Hokuriku Suiden Kogyo K. K. ...	16,460	340	300	Hime-gawa
Tokyo Electric Light Co., Ltd. ...	28,240	335	750	Katsuragawa	Kiso Denki Seitetsu K. K. ...	10,476	233	400	Yazukuri-gawa
Tokyo Electric Light Co., Ltd. ...	63,730	378	1,500	Katsuragawa	Yazukuri Suiryoku K. K. ...	7,388	939	70	Kaminura-gawa
Tokyo Electric Light Co., Ltd. ...	3,102	268	100	Hyato-gawa	Yazukuri Suiryoku K. K. ...	13,721	—	130	Kaminura-gawa
Tokyo Electric Light Co., Ltd. ...	4,563	406	100	Nakatsu-gawa	Yazukuri Suiryoku K. K. ...	2,369	281	75	Kaminura-gawa
Mr. Y. Mizushima and 28 others...	5,058	150	300	Nakatsu-gawa	Yazukuri Suiryoku K. K. ...	4,267	—	135	Kaminura-gawa
Mr. Soichiro Asano ...	15,524	828	831:164	Naka & Yotsuki-gawa	Kabushiki Kaisha Denki Seido-jo	3,170	94	300	Kiso-gawa
Mr. Soichiro Asano ...	4,561	1,157	35	Kurokura-gawa	Kiso Denki Seitetsu K. K. ...	42,916	544	800	Kiso-gawa
Fiji Gassed Yarn Spinning Co. ...	3,914	265	130	Kamachi-gawa	Kiso Denki Seitetsu K. K. ...	15,736	140	1,000	Kiso-gawa
Fiji Gassed Yarn Spinning Co. ...	11,465	136	750	Sakama-gawa	Kiso Denki Seitetsu K. K. ...	41,138	305	1,200	Kiso-gawa
Fiji Gassed Yarn Spinning Co. ...	6,912	82	750	Sakama-gawa	Kiso Denki Seitetsu K. K. ...	22,356	153	1,300	Kiso-gawa
Fiji Gassed Yarn Spinning Co. ...	9,660	215	400	Sakama-gawa	Nagoya Electric Light Co., Ltd. ...	17,592	141	1,000	Kiso-gawa
Fiji Gassed Yarn Spinning Co. ...	9,441	300	280	Sugama-gawa	Ibigawa Denka Kogyo K. K. ...	14,162	315	400	Ibi-gawa
Fiji Gassed Yarn Spinning Co. ...	6,439	143	400	Sugama-gawa	Ibigawa Denka Kogyo K. K. ...	6,978	388	160	Hirose-gawa
Yokohama Electric Co., Ltd. ...	6,474	720	80	Hayakawa	Ibigawa Denka Kogyo K. K. ...	7,053	251	250	Hirose-gawa
Odawara Electric Railway Co. ...	4,653	689	50	Suigumo-gawa	Nisshin Spinning Co., Ltd. ...	6,351	113	500	Kuroke-gawa
Odawara Electric Railway Co. ...	688	102	50	Suigumo-gawa	Nippon Denki Kogyo K. K. ...	14,108	4,184	300	Katagu-gawa
Katsuragawa Denryoku K. K. ...	5,610	210	280	Seiko-gawa	Nippon Denki Kogyo K. K. ...	3,714	—	140	Katagu-gawa
Nippon Suiryoku Denki K. K. ...	5,718	330	154	Fuji-kawa	Nippon Denki Kogyo K. K. ...	5,900	174	300	Katagu-gawa
Tokyo Electric Light Co., Ltd. ...	4,486	4,435	90	Fuji-kawa	Tateyama Suiryoku Denki K. K. ...	9,104	540	150	Hayatsuki-gawa
Hayakawa Suiryoku Denki K. K. ...	16,520	490	300	Haya-kawa	Ishido Denki K. K. ...	3,399	420	72	Kumagumi-gawa
Mr. E. Tajima and 5 others ...	15,736	280	500	Azuma-gawa	Toyama Denki K. K. ...	4,384	150	260	Shintsu-gawa
Mr. E. Tajima and 5 others ...	11,800	150	800	Azuma-gawa	Toyama Denki K. K. ...	11,590	85	1,200	Shintsu-gawa
Mr. Shiraishi & 11 others ...	3,675	218	150	Shinryu-gawa	Mitsui Mining Co., Ltd. ...	6,924	1,120	55	Atotsu-gawa
Torigawa Suiryoku Denki K. K. ...	4,300	800	50	Tori-gawa	Kanazawa Electric & Gas Co., Ltd. ...	8,649	171	450	Tetori-gawa
Torigawa Suiryoku Denki K. K. ...	3,370	300	100	Tori-gawa	Nakagun Denryoku K. K. ...	15,933	378	375	Tetori-gawa
Torigawa Suiryoku Denki K. K. ...	3,548	315	100	Tori-gawa	Nakagun Denryoku K. K. ...	4,968	221	200	Tetori-gawa
Torigawa Suiryoku Denki K. K. ...	5,946	359	200	Tori-gawa	Kanazawa Electric & Gas Co., Ltd. ...	4,852	109	396	Tetori-gawa
Torigawa Suiryoku Denki K. K. ...	11,408	1,450	70	Daiya-gawa	Nakagun Denryoku K. K. ...	21,294	421	450	Oho-gawa
Furukawa Gomei Kaisha ...	10,900	320	300	Daiya-gawa	Mr. Gotaro Yamamoto & 11 others	7,249	122	530	Kuzuriyu-gawa
Furukawa Gomei Kaisha ...	10,420	714	130	Daiya-gawa	Tokai Suiryoku Denki K. K. ...	16,419	440	332	Kuzuriyu-gawa
Furukawa Gomei Kaisha ...	3,480	643	48	Daiya-gawa	Taisho Suiryoku Denki K. K. ...	7,166	639	100	Amano-gawa
Kinugawa Suiryoku Denki K. K. ...	18,375	517	320	Kinu-gawa	Taisho Suiryoku Denki K. K. ...	14,960	242	550	Kotsu-gawa
Kinugawa Suiryoku Denki K. K. ...	73,256	1,025	600	Kinu-gawa	Wakayama Suiryoku Denki K. K. ...	8,138	181	400	Totsu-gawa
Kinugawa Suiryoku Denki K. K. ...	11,800	150	700	Kinu-gawa Tone-gawa	Osaka Suiryoku Denki K. K. ...	31,050	638	433	Kitatama-higashi-gawa
Nippon Suiryoku K. K. ...	6,970	200	305	Kinu-gawa Tone-gawa	Osaka Suiryoku Denki K. K. ...	7,624	357	190	Kitatama-higashi-gawa
Kinugawa Suiryoku Denki K. K. ...	21,918	650	300	Ojika-gawa	Osaka Suiryoku Denki K. K. ...	34,047	1,317	230	Maiki-gawa
Tonegawa Suiryoku Denki K. K. ...	9,554	570	500	Tone-gawa	Wakayama Suiryoku Denki K. K. ...	5,058	180	250	Higaka-gawa
Tonegawa Suiryoku Denki K. K. ...	13,545	171	700	Tone-gawa	Wakayama Suiryoku Denki K. K. ...	3,228	76	375	Suirakawa-matakawa
Tonegawa Suiryoku Denki K. K. ...	21,244	270	706	Tone-gawa	Hidakagawa Suiryoku Denki K. K. ...	3,653	130	250	Suirakawa-matakawa
Tonegawa Suiryoku Denki K. K. ...	20,232	400	450	Tone-gawa	Yamato Denki K. K. ...	11,240	500	200	Yoshimo-gawa
Tonegawa Suiryoku Denki K. K. ...	27,920	207	1,200	Tone-gawa	Kyoto Electric Light Co., Ltd. ...	5,540	74	666	Kitsu-gawa
Nippon Suiryoku Denki K. K. ...	33,729	250	1,200	Tone-gawa	Kyoto Municipality ...	8,936	106	750	Drainage
Tonegawa Suiryoku Denki K. K. ...	21,918	130	1,500	Tone-gawa	Ujigawa Denki K. K. ...	50,692	205	2,200	Uji-gawa
Mr. T. Nomura and 17 others ...	10,163	25	3,617	Tone-gawa	Ujigawa Denki K. K. ...	13,488	60	2,000	Uji-gawa
Tonegawa Suiryoku Denki K. K. ...	5,339	1,900	25	Numao-gawa	Ujigawa Denki K. K. ...	27,650	123	2,000	Uji-gawa
Tonegawa Suiryoku Denki K. K. ...	10,307	262	350	Naramatasawa	Sanyo Suiryoku Denki K. K. ...	9,199	1,364	60	Kitamata-gawa
Mr. J. Fujiyama ...	7,711	980	70	Ara-kawa	Hiroshima-Kure Denki K. K. ...	5,395	48	1,000	Ka-ai-gawa
Mr. J. Fujiyama ...	14,027	312	400	Ara-kawa	Bisaku Denki K. K. ...	10,358	373	247	Yoshii-gawa
Mr. J. Fujiyama ...	10,116	180	500	Ara-kawa	Okayama Suiden K. K. ...	6,498	289	200	Asahi-gawa
Mr. J. Fujiyama ...	9,442	140	600	Ara-kawa	Ryobi Suiryoku Denki K. K. ...	4,018	325	110	Yukase-gawa
Yokkaichi Paper Mfg. Co., Ltd. ...	5,507	1,678	292	Ara-kawa	Hiroshima Electric Light Co., Ltd. ...	2,844	46	550	Ota-gawa
Fuji Suiden K. K. ...	5,653	265	300	Ara-kawa	Kosegawa Suiryoku Denki K. K. ...	3,044	2,557	120	Kose-gawa
Anglo-Japanese W. P. Electric Co. ...	62,500	1,122	480	Oi-gawa	Hiroshima Electric Light Co., Ltd. ...	4,046	36	1,000	Ota-gawa
Anglo-Japanese W. P. Electric Co. ...	50,265	2,236	200	Oi-gawa	Tosa Yoshinegawa Suiryoku Denki K. K. ...	3,709	330	100	Yoshimo-gawa
Tokai Shiryu K. K. ...	3,934	70	500	Oi-gawa	Baron K. Sumitomo ...	6,137	1,820	30	Nichiuradani
Furukawa Mining Co., Ltd. ...	7,193	80	800	Tenryu-gawa	Shikoku Suiryoku Denki K. K. ...	5,468	278	175	Sotani-gawa
Furukawa Mining Co., Ltd. ...	3,822	680	50	Oiri-gawa	Shikoku Suiryoku Denki K. K. ...	5,304	130	363	Sotani-gawa
Baron K. Den ...	4,496	80	500	Nagase-gawa	Tokushima Suiryoku Denki K. K. ...	3,596	80	400	Naka-gawa
Baron K. Den ...	14,050	250	500	Nagase-gawa	Iyo Tetsudo Denki K. K. ...	4,510	538	75	Kuro-gawa
Baron K. Den ...	16,860	250	600	Nagase-gawa	Iyo Tetsudo Denki K. K. ...	4,555	1,513	79	Kuro-gawa
Baron K. Den ...	11,802	150	700	Nagase-gawa	Kyushu Suiryoku Denki K. K. ...	7,081	315	—	Oita-gawa
Takata Mining Co., Ltd. ...	15,376	228	600	O-kawa	Kyushu Suiryoku Denki K. K. ...	3,541	105	—	Asono-gawa
Nippon Kogaku Kogyo K. K. ...	3,951	58	607	Hibashi-gawa	Kyushu Suiryoku Denki K. K. ...	4,586	162	400	Oita-gawa
Inawashiro Suiryoku Denki K. K. ...	63,573	353	1,600	Hibashi-gawa	Kyushu Suiryoku Denki K. K. ...	3,080	45	609	Ono-gawa
Inawashiro Suiryoku Denki K. K. ...	40,467	225	1,400	Hibashi-gawa	Onogawa Suiryoku Denki K. K. ...	11,802	140	750	Ono-gawa
Inawashiro Suiryoku Denki K. K. ...	14,500	116	1,100	Hibashi-gawa	Kyushu Suiryoku Denki K. K. ...	11,521	205	500	Ono-gawa
Niigata Suiden K. K. ...	3,473	222	135	Iitayo-gawa	Kyushu Suiryoku Denki K. K. ...	6,474	240	240	Shirataka-gawa
Niigata Suiden K. K. ...	3,462	154	200	Iitayo-gawa	Mr. F. Kuhara ...	5,541	170	390	Gokase-gawa
Tochin Denki K. K. ...	5,508	140	350	Chikuma-gawa	Denki Kogaku Kogyo K. K. ...	9,059	62	1,300	Nawase-gawa
Tochin Denki K. K. ...	12,589	280	400	Chikuma-gawa	Denki Kogaku Kogyo K. K. ...	9,059	606	1,330	Nawase-gawa
Shimano Suiden Kogaku Kogyo K. K. ...	3,100	54	500	Fukata Reservoir	Hyuga Suiryoku Denki K. K. ...	3,204	306	95	Ayakita-gawa
Shinanogawa Suiryoku Denki K. K. ...	177,030	350	4,500	Chikuma-gawa	Kanzoku Denki K. K. ...	5,614	370	135	O-gawa
Railway Bureau ...	9,891	160	550	Chikuma-gawa	Kanzoku Denki K. K. ...	3,001	178	150	Kayama-gawa
Chikuma-gawa Denki K. K. ...	23,553	110	1,905	Chikuma-gawa	Denki Kogyo Gas Co., Ltd. ...	11,512	1,641	63	Kanayama-gawa
Meiji Suiryoku Denki K. K. ...	14,057	962	130	Takase-gawa	Denki Kogyo Gas Co., Ltd. ...	4,215	125	300	Kanayama-gawa
Hokushin Denryoku K. K. ...	8,168	1,800	40	Kadoma-gawa	Denki Kogyo Gas Co., Ltd. ...	4,454	317	195	Matsunaga-gawa
Nakatsugawa Suiryoku Denki K. K. ...	3,709	330	100	Nakatsu-gawa	Denki Kogyo Gas Co., Ltd. ...	17,237	1,533	100	Awa-gawa
Nakatsugawa Suiryoku Denki K. K. ...	21,952	558	350	Nakatsu-gawa	Nippon Suiryoku Denki K. K. ...	3,639	46	700	Kawauchi-gawa
Nippon Suiryoku Denki K. K. ...	24,046	962	220	Kiyotsu-gawa	Nippon Chisso Hiryo K. K. ...	11,128	110	900	Kawauchi-gawa
Hokuyetsu Suiryoku Denki K. K. ...	3,147	140	200	Mikuni-gawa	Nippon Chisso Hiryo K. K. ...	16,051	204	700	Kawauchi-gawa
Echigo Denki K. K. ...	3,956	176	200	Seki-gawa	Nippon Chisso Hiryo K. K. ...	15,107	80	80	Kawauchi-gawa
Echigo Denki K. K. ...	8,821	327	240	Seki-gawa	Midorigama Denryoku K. K. ...	11,221	487	75	Kasagara-gawa
Shinano Denki K. K. ...	10,770	407	337	Seki-gawa	Nippon Chisso Hiryo K. K. ...	8,318	185	400	Midori-gawa
Shinano Denki K. K. ...	7,868	560	125	Seki-gawa	Kyushu Paper Manufacturing Co. Limited ...	7,180	175	365	Senryu-gawa
Etsunichi Denki K. K. ...	3,111	102	271	Seki-gawa					





Map of 77,000-Volt System of Katsuragawa Hydroelectric Company, Serving Tokio

Name of Company and Individuals	Horse Power	Head	Quantity	Source
Nippon Cement Co., Ltd. ...	4,046	80	450	Midari-gawa
Nippon Chisso Hiryo K. K. ...	4,322	769	50	Naidaichin-gawa
Kumanoto Denki K. K. ...	27,313	810	300	Midori-gawa
Kyushu Suiryoku Denki K. K. ...	14,516	287	450	Kushi-gawa
Kyushu Suiryoku Denki K. K. ...	10,566	—	400	Kushi-gawa
Kyushu Suiryoku Denki K. K. ...	26,414	235	1,000	Kushi-gawa
Kyushu Suiryoku Denki K. K. ...	4,496	40	1,000	Oyama-gawa
Kyushu Suiryoku Denki K. K. ...	20,682	230	800	Oyama-gawa
Kyushu Suiryoku Denki K. K. ...	16,860	1,000	150	Naruko-gawa
Kyushu Suiryoku Denki K. K. ...	15,107	56	2,600	Mikuma-gawa
Kyushu Suiryoku Denki K. K. ...	11,662	415	250	Kawakami-gawa
Sin-yetsu Denryoku K. K. ...	178,762	350	4,500	Chikuma-gawa
Railway Bureau ...	204,500	360	5,000	Chikuma-gawa
Ujigawa Denki K. K. ...	27,000	126	2,000	Yodo-gawa
Sogawa Suiryoku K. K. ...	22,727	144	2,000	So-gawa
Kiso Denki Kogyo K. K. ...	19,635	105	1,700	Oi Water power
Kiso Denki Kogyo K. K. ...	30,607	111	2,500	Kasagi Water power
Kiso Denki Kogyo K. K. ...	32,093	182	1,600	Nishikitsu Water power
Kiso Denki Kogyo K. K. ...	14,940	67	2,000	Imawatsi Water power
Toyo Aluminium Co., Ltd. ...	15,454	278	490	Kurobe-gawa No. 1
Toyo Aluminium Co., Ltd. ...	12,215	291	372	Kurobe-gawa No. 2
Toyo Aluminium Co., Ltd. ...	19,162	563	300	Kurobe-gawa No. 3
Toyo Aluminium Co., Ltd. ...	5,963	584	92	Kuronagi-gawa
Toyo Aluminium Co., Ltd. ...	4,109	850	45	Sobotani-gawa No. 5
Baron Shibusawa, Mr. Heizaburo				
Okawa & others ...	100,000	450	2,000	Fuji-kawa

number of electric lamps installed, together with their total candle-power since 1914:—

(In thousands)			
Year	Electric Lamps No.	Total Candle Power	Inc. of Candle Power over Previous Year
1914 ...	7,706	71,401	—
1915 ...	8,420	78,860	7,459
1916 ...	9,975	107,907	29,047
1917 ...	11,318	135,982	28,075
1918 ...	12,210	150,000	14,018

The number of electric lamps and total candle-power work out at 118 lamps per 100 houses and at 21.5 lamps and 264 candle-power per 100 capita. These are the average rates, and, according to district, the number of electric lamps per 100 capita is 77.2 in Tokyo Prefecture, which leads the list. Osaka comes next with 53.7 lamps, being followed by Fukuoka Prefecture with 44.2 per cent. and Kyoto Prefecture with 39.5 lamps. Tokyo, Yokohama, Osaka and Kobe take up 30 per cent. of the total. The demand for power has been greater than that for lights. The following table gives the number of electric motors and their total horse-power since 1913:—

(In thousands)			
Year	Number	Electric Motors Total Capacity H. P.	Increase of Total Capacity over Previous Year H. P.
1913 ...	27	107	—
1914 ...	35	148	41
1915 ...	42	182	34
1916 ...	54	235	53
1917 ...	67	314	79
1918 ...	79	487	173

As may be seen from the above table, the number of motors and their total capacity in 1918 were three times and five times as much as those in 1913. The price of electric power has dropped in recent years against the upward tendency of general commodities, due to the extension and improvement of the electric industrial system. In 1914 the average price was 60 sen for one 10 candle-power carbon lamp and 55 sen for one 10 candle-power metal lamp, but it was 59 sen and 56 sen respectively for 1917, although it rose to 62 sen and 59 sen respectively in 1918. The average electric power daytime price was 6.78 yen per horse-power and 5.6 sen per kilowatt in 1914, but it fell to 6.77 yen and 5.2 sen respectively in 1917, although it advanced to 6.90 yen and 5.5 sen respectively in 1918.

The electric companies' earnings are shown in the following table:—

(In Thousands of Yen)			
Year	Paid-up Capital	Earnings	Proportion of Earnings to Paid-up Capital Per cent.
1914 ...	460,360	30,370	6.6
1915 ...	488,590	37,900	7.7
1916 ...	513,690	47,190	9.2
1917 ...	578,950	62,090	10.7
1918 ...	645,680	94,270	15.0

The following table shows the capital invested in the electric lighting and power industries since 1913:—

(In Thousands of Yen)			
Year	Paid-up Capital	Fixed Capital	Debentures and Loans
1913 ...	397,780	477,628	79,383
1914 ...	460,355	556,072	98,697
1915 ...	488,587	600,221	107,556
1916 ...	513,839	620,678	110,472
1917 ...	578,946	676,021	114,380
1918 ...	645,680	718,070	136,910
1919 ...	712,414	760,119	159,440

In order to develop the industry and to restrict competition, several of the companies have combined. During the period from January to August 74 companies were combined into 34 concerns, the total capital involved reaching Y.284,000,000. Other combinations are being considered, and when the capital of these companies is added to the above amount, the total may come up to upwards of Y.300,000,000.

There are great possibilities for the development of the industry in the country. In all there are 110 rivers in Japan, some of which are capable of producing 200,000 horse-power, and others 100,000.

## Water and Steam Power Enterprises

An official report released on November 5 showed that in December, 1919, Japan had 2,639 electric power plants with a total yield of 10,000,000 horse-power. The following table gives the number of water and steam power electrical enterprises, since 1914:—

Year	Water Power No.	Steam Power No.	Total No.	Steam Power Enterprises over Water Power Enterprises No.
1914 ...	695	1,245	1,940	550
1915 ...	943	1,297	2,240	354
1916 ...	1,195	1,422	2,617	227
1917 ...	1,331	1,560	2,891	229
1918 ...	1,504	1,636	3,140	132
1919 ...	1,667	1,712	3,389	35

The generating capacity of electricity between the water power and steam power enterprises may be mentioned as follows:—

(In thousands of Kilowatts)

Year	Water Power	Steam Power	Total	Water Power over Steam Power
1914 ...	416	299	715	117
1915 ...	449	322	771	127
1916 ...	469	335	804	134
1917 ...	511	364	875	147
1918 ...	597	386	983	211
1919 ...	683	408	1,091	275

The above table shows that the electricity generated by water power increased so much in the past two years as to exceed that developed by steam power by 211,000 kilowatts for 1918 and by 270,000 kilowatts for 1919. It is particularly noteworthy that, in addition to power companies, electric railway and government offices, several industrial companies, notably, chemical works, have begun to generate hydro-electricity on a large scale.

Turning to the demand for electricity, the following table shows the



# "The Filipinos Need, and Want Forbes"——

—John W. Hausserman

THEY HAVE LEARNED TO KNOW THEIR FRIEND

"ONE of the most gratifying signs of the times in the Philippines is the longing admitted by a large body of Filipinos for the return of Forbes. They have come to realize his worth to the islands . . . They would gladly present him with the evidence that they want him back."—John W. Hausserman.

The sweeping Republican victory has caused the more sober element among the Filipinos to turn their thoughts and hopes towards the Old Bay State, according to Mr. John W. Hausserman, soldier, law officer, and successful Philippine lawyer and business man, who was interviewed for THE FAR EASTERN REVIEW while in Shanghai, homeward bound to New Richmond, O., from Manila. "They need, and they want Forbes," said this sound student of American development in the islands.

"If they cannot get Mr. Forbes," he says; "they feel that they should get a man of his knowledge, experience and type. Their longing for Forbes is one of the most gratifying signs of the times in the Philippines. They have come to realize his worth to the islands. They didn't see it when he was doing so much for their prosperity and happiness as governor-general, but they see it, now. They fully realize that, in all probability, Mr. Forbes will not be willing to come back to the islands; but, if they thought he would respond to their call, they would gladly present him with the evidence that they

want him back. They would be very willing to do this in the form of a letter or something like that."

Mr. Hausserman said that while the Filipinos don't want the Jones Act repealed or modified, they are perfectly willing that the governor-general shall perform the duties specified in that act. "They are conscious," he says; "that many of their departments are not functioning efficiently. They recognize their need of the sympathetic co-operation and strengthening direction of friendly

Americans. For instance, we have in the islands a splendid system of education. It suits the needs of the people, giving proper emphasis to vocational training. Still, the need of more American teachers is acute.

"The children of school age are the largest, most delicate and most important asset of every nation. No matter how statesmen apply themselves to pressing post-war problems, no solution will be of permanent value unless more time and thought be given to the training of our children. Within the next fifteen years the school children of to-day will be the ruling force in each and every country—the Philippines not excluded. This is a fact that is self-evident and cannot be changed.

"In the Philippines, the problem is a little more acute and complicated because America in 1898 took over the sovereignty of these islands from Spain with the sole idea of making the Philippines a self-govern-



HONORABLE W. CAMERON FORBES,

Regarded Alike by Filipinos and Americans in the Philippines as the Highest Type of Governor-General





Mr John W. Hausserman

ing commonwealth within the shortest time possible. The Filipino were then a people without a common language, and without a school system worthy of the name. The first and most important factor was to provide a common language and a public school system to enable every child to obtain at least a primary and secondary school education. This was and is a great task; a costly task, but one well worthy the necessary cost and sacrifice.

"The Filipino people have done their part well—exceedingly well. No people within the annals of recorded history has made greater progress in so short a time. But as time goes on, the problem, becomes more complicated and more costly. The government of the Philippines is spending about fifteen million pesos annually for public education. Realizing, as I do, the many perplexing problems involving the large expenditures of money that the government must meet, I am not prepared to say that a much greater sum can be raised for educational purposes, but I am certain that a sum much larger than fifteen million pesos is required to give the children of these islands the educational facilities due them.

"The Bureau of Education is doing its very best with the means at hand. The teachers, both Americans and Filipinos, are doing their very best. The more one studies the work of the bureau, the more one marvels at the progress made with the funds allotted: the director of education and his assistants, including the whole corps of teachers, are entitled to the sympathetic support and co-operation of the entire community. But truth compels me to note that the products of our Philippine schools of to-day do not compare favorably with the graduates of a few years ago.

"There has been a material decrease in efficiency of the graduate pupils. This is not the fault of the pupils, nor can blame be attached to the individual teachers or to the officials of the bureau.

"In my opinion the fault lies in the fact that as school facilities have been extended from time to time, there has not been a corresponding increase of the number of competent teachers. The training schools have not had the means or the time to turn out properly trained teachers as fast as needed. The decrease in

efficiency in the English language is accounted for by the fact that in the past we had the services of more than a thousand American teachers, while now the department must get along with less than 400 American teachers. This, too, notwithstanding that when we had 1,000 American teachers, there were only about 200,000 pupils in the schools, while now more than 850,000 pupils, we have less than 400 American teachers.

"What is the remedy? It all depends on money. The people of the islands, if they are to reap the benefits of their political aspirations, must make a greater sacrifice by increased taxation for school purposes. The Filipino people have always gladly assumed the necessary financial burdens in the interest of education, and I am confident, if properly presented, they will willingly contribute more, but the real need is beyond the financial power of the islands.

"The education of the children of the Philippine Islands is not the exclusive problem of the inhabitants of the islands. It is an American-Filipino problem. So long as America retains sovereignty over these islands, she cannot escape or shift the burdens or obligations of sovereignty. Education of the people is one of the obligations of the sovereign power; hence, America does not discharge her full duty to these people until she brings within the reach of every child of the islands, the opportunity for a proper and efficient training in English in all the studies of the primary and secondary schools.

"The children need more highly trained teachers—both Filipino and American. The government of the islands has done, or will do its utmost to provide all the funds within the power of the people of the islands. But it cannot do the impossible. There is a limit to taxation. America must perform its full duty, by assuming a portion of the financial burden. The American element of this community will not discharge its full duty until it studies the educational needs of the islands, and assumes the task of bringing these needs to the attention of the American people at home, with the idea of asking Congress to assume a portion of the burden by an annual appropriation from the Federal Treasury to be placed to the credit of the Bureau of Education of these islands of a sum sufficient to pay the cost of at least 1,000 American teachers. Here is a work worthy of Americans."

#### JAPANESE EMIGRATION COMPANY LIQUIDATES.—

The Morioka Emigration Company which is conducting an emigration business to Peru has decided to wind up and sell its business to the Kaigai Industrial Kogyo Kaisha (Oversea Industrial Company). The company was a limited partnership of long-standing and one of the few emigration establishments in Japan. Lately it combined with the Kaigai Kogyo Kaisha, which is mainly conducting business connected with emigration to Brazil and the Philippines.

#### ELIMINATION OF FOREIGN POST OFFICES IN CHINA.—

It is reported that China will take up the question of eliminating foreign post offices in Chinese territory, at the International Postal Conference. Mr. Liu Wu-cheng, Chinese delegate, has already obtained the promise of support from the American government, but the other powers do not appear to favor this suggestion. Mr. Liu considers that the Chinese government should first demand the elimination of foreign post offices in China, from the governments of Britain, America, France and Japan, through the Chinese ministers of those countries, and then if necessary, take up the matter at the Postal Conference.—*Sin Wan Pao*.

#### SUBSIDY TO CHINESE DELEGATES TO THE INTERNATIONAL SILK EXPOSITION.—

It was decided at the cabinet meeting of November 18, that the Peking government should donate a subsidiary of Tls. 20,000 to the Chinese delegation of the International Silk Exposition. This sum was therefore handed to the delegation by the Customs.—*Sin Wan Pao*.



## Lamont Defends Japan's Position

Better Understanding of China and Japan by Americans  
is a Necessity

**S**PEAKING on China before four hundred members of the American Manufacturers' Export Association at a luncheon given at the Pennsylvania Hotel, New York City, Mr. Thomas W. Lamont, of J. P. Morgan & Co., made a plea for a better understanding of Chinese and Japanese affairs by Americans. He declared there was a rich field for American trade in the Far East generally, and said that co-operation and tact, rather than scepticism and antagonism, would work to the great benefit of the United States and Japan in immigration difficulties.



MR. THOMAS W. LAMONT  
Chairman of the Chinese Financial Consortium

Mr. Lamont, recently returned from a mission to China, said that Americans, in order to understand China, must visit not only that country, but Japan as well. He added that to know Japan one must know China.

"The first step toward building up your American trade in the Far East," he said, "is to secure an adequate understanding of these various peoples over there, their modes of life, their habits of mind, their ambitions and ideals."

"Gradually the European nations have come to realize that the policy of the warship and of 'grab' is outworn, and that they could best serve the interests of their own nationals, to say nothing of China's, by stopping the race for concessions and by adopting plans of co-operations."

Mr. Lamont said the clearest and most recent tangible evidence of this was in the formation of the new consortium for the assistance of China.

He said the Chinese had deep confidence in America and were

looking to this country as her guide, her counsellor and her friend. One reason for this, he said, was that America had never sought to exploit China nor dominate any part of her territory.

Mr. Lamont said he had never imagined until he went there that there could be a region calling for the products of American industry so strongly as China will call within the next twenty years.

"And don't forget," he said, "that to keep 400,000,000 people supplied with motion picture shows will be quite a task even for Americans!"

"As for Japan and the charge that Japanese men of business are sharp and untrustworthy, 'forget it.' It is not so. The Japanese men are not as frank as we are. They want to be but don't know how. For generations they have been taught reserve. But I want no honester person to deal with than the Japanese business man. As far as he alone is concerned you can well afford to trust him and to enter into important relations with him."

## Four Friendly Powers Approve the Consortium

A Reuter's message from New York, dated November 19, says: Formal approval of the Chinese Consortium by the United States, Great Britain, France and Japan is announced in a statement issued by Mr. J. P. Morgan on behalf of the American banking group. The agreement was signed on October 15 and is to remain in force for five years unless a majority of the groups wish to terminate it before the expiration of that period.

## Japanese Official Expression of Gratification

The Japanese foreign office, according to Reuter's dispatch from Tokyo, November 20, has issued a *communiqué* similar in form to one which is published simultaneously in Great Britain, the United States and France.

In this the Japanese government states that it is gratified to learn that the provisional agreement concluded among the representatives of British, French, American and Japanese banking syndicates in Paris in May of last year, for the formation of a new loan Consortium for the purpose of assisting China, has now been ratified by the banking syndicates of the four countries concerned.

The Consortium is fully recognized by the four governments. It has been organized to enable China to raise the funds necessary for the construction of improved means of communication and transport as public loans with the Chinese government or properly accredited provincial representatives under the belief that such loans will best promote China's interests, thus aiding China's efforts to attain unification and stability, and coincidentally giving equal opportunity to the individual enterprises of all nationals, while extending the sphere of their economic activity in China.

It is believed that such co-operation will facilitate a mutual understanding regarding Oriental questions among the five countries concerned.

## Motion by a Kiangsu Assemblyman Against the New Consortium

A motion has been inaugurated by Mr. Hsu Ying, a Kiangsu assemblyman, against the new Consortium. Mr. Hsu pointed out that, "above all the restraints detrimental to China's sovereignty and independence imposed on her by the conditions on which the loans will be borrowed from the new Consortium, the most intolerable is the condition that all such loans should be borrowed on the security of the land tax."—*Sin Wan Pao*.

## Chinese Bankers to Meet

Reuter's Peking correspondent says that representatives of the Chinese banks in China and abroad are being asked to meet in Peking in January to discuss the attitude to be adopted towards the Consortium.



# Korean Government Desires Railway Control



KOREAN RAILWAYS: HORSE-SHOE CURVE OF RAILWAY AT MOSAN PASS

A unique feature of the Seishin-Kwainai Line,  
North Kankyō Province.

Radius, 13 chains.  
Grade, 1 in 80.

7 tunnels in 4.7 miles,  
between Sohyō and Zenkyori Stations.

IN accordance with an Imperial Ordinance of July 31, 1917, the Korean State Railways came under the management of the South Manchuria Railway Company. The total mileage thus transferred amounted to 1,006, of which, 324 formed the Keijo-Fusan line, 361 the Keijo-Shingishu line, 138 the Keijo-Gensan, 176 the Konan, 33.9 the southern portion and 32.2 the northern portion of the Kankyō line. One of the conditions of the contract entered into at that time between the government-general of Chosen and the S.M.R. Company was that a sum equivalent to six per cent. on the capital account of the lines should be paid annually to the Chosen government. The contract was to run for twenty years, and provided that the government could regain recovery of the management of the lines whenever it was deemed necessary.

The government of Chosen now considers that the payment of six per cent. on the capital outlay of the lines is inadequate in view of the financial condition of the country, and has approached the Tokyo government for authority to terminate the arrangement.

It appears, however, that the imperial government still adheres to the reasons which originally influenced it to authorize the consolidation, and the transfer may not be permitted to take place. The two systems are in reality one great web for the development of the territory and strategic defense, and it became necessary to centralize the management under one head so as to provide uniformity in rates and connections, and facilitate prompt dispatch and interchange of cars.

## Washington Vanderlip's Deal with Lenin

NEW YORK, November 22.—The London correspondent of the *New York Herald* has had an interesting interview with Mr. Washington Vanderlip who has just returned from a two months' stay in Moscow, bringing with him, so he claims, contracts to the value of several billion dollars.

"I have contracts," Mr. Vanderlip told the correspondent, who had asked whether Russia was now swinging towards the right, "to establish factories throughout Russia. When I first made my proposal, Lenin informed me that the factories must be run under soviet law. I replied that that was impossible, and prepared to leave Moscow the next day. Lenin held a cabinet meeting which lasted eighteen hours and then replied:

"Please run the factories to suit yourself."

Mr. Vanderlip hopes to meet the Russian demand for 22,000 locomotives, 10,000 aeroplanes, 2,000,000 tons of rails and \$1,000,000 worth of other commodities of American origin. Asked how Russia was going to pay, Mr. Vanderlip said that that was a matter which concerned himself and his syndicate.

With regard to the Eastern Siberian concession, which Mr. Vanderlip's syndicate has secured and which the *Herald* correspondent says is "bigger than anything since Cecil Rhodes built the South African Empire," Mr. Vanderlip said that as soon as the concession became effective, there was "cargo to be carried to

America enough to keep the Shipping Board's idle fleet busy for forty years."

The Kamchatka fisheries included in the concession were twice as great as the salmon industry of Alaska, Mr. Vanderlip said; there was sufficient oil supply to meet the whole of Canada's demand, without Canada having to rely on the United States. In addition, there was grain throughout Siberia, if transportation were organized.

Mr. Vanderlip told the *Herald* that Lenin had asked him if a social revolution was likely to come in America. Mr. Vanderlip said that he had replied "not in ten thousand years," whereupon Lenin remarked: "Everybody in America has an automobile; perhaps you are right."

When Lenin questioned Mr. Vanderlip concerning the Japanese protest against the Siberian concession the American retorted "It is none of my business."

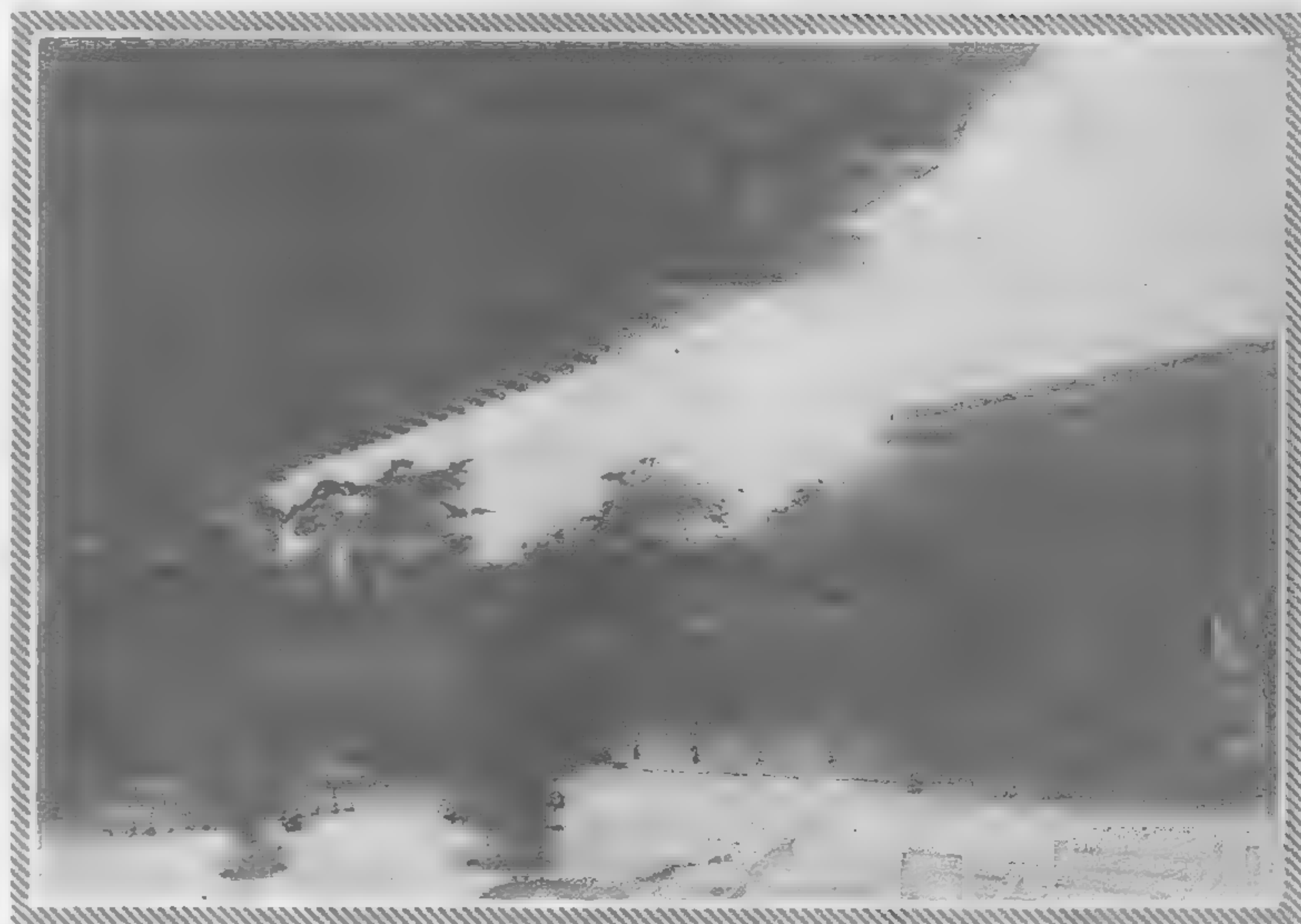
In conclusion, the correspondent asked Mr. Vanderlip whether the Bolshevik communist theory would succeed.

"No, nonsense," replied Mr. Vanderlip, "they know in their heart-of-hearts it will not succeed."

## Japan Making Inquiries

Tokio, Nov. 23.—The *Kokumin* states that the cabinet has decided to make formal inquiries in the United States respecting the Vanderlip concession in Siberia as a basis for subsequent steps if such should be considered necessary.





## THE GREAT MEIJI SHRINE

THE loving tribute of a grateful nation to the memory of the late Emperor of Japan was dedicated on November 3. Commenced in 1915, it covers an area of 218,893 *tsubo* of which 6,500 *tsubo* are inside the walls, and 650 occupied by the buildings. The cost is about Yen 5,219,000. The construction is in the old Japanese style, all specially wrought and carved woodwork. The main timbers came from Kiso and Mt. Ari in Formosa, and other woods entering into the construction were brought from every prefecture in the empire, including Kórea, Formosa, Karafuto and the Kwangtung Territory in China. A total of 110,000 trees and 200 different kinds of wood were employed. Thousands of young Japanese, members of the Young Men's Societies, contributed their money and voluntary labor which, if paid for, would have increased the cost of the shrine to Yen 20,000,000. The work is far from completion, for the grounds surrounding the shrine are to be transformed into the largest athletic field in Japan and a huge stadium erected. It is planned to make the shrine the natural life-centre of Japan's young men.





## American Tendencies and Asiatic Necessities

By Patrick Gallagher

ONE of the reasons why discriminating foreign critics usually find the germ of longevity in the American system of government is because they recognize that some time or other in the dim and distant future self-interest will undoubtedly incline the more highly developed nations to seek a co-operative rather than a competitive growth. Self-interest gave birth to the high principle that drew the colonies together and kept the United States together, even at the high cost of the longest and most sanguinary civil war in modern history. From Washington to Wilson, many alluring illusions had to be dissipated; Jefferson's Louisiana purchase taught the statesmen of the new commonwealth that even the loftiest ideals must give way before hard facts and human tendencies. Nevertheless, the supreme principle has always been kept intact through the conviction that safety must be sought in co-operation, exercising the mandate of the majority with a just regard for the rights and welfare of the minority.

Co-operation is possible only among equals. Therefore, the states (although unequal in many vital physical respects) found political equality in the Senate. The Senate became the bulwark of the union. The election of a Senator to the presidency is a reminder that the Senate is the bulwark of the American Commonwealth. In matters that concern all the states it is not enough that a President may feel inspired to action, however laudable; his act must bear the stamp of co-operative approval that can be applied only by the Senate. Caution is an American tendency that wisdom dictated and experience has confirmed. Americans are emotional, but their emotion is always modified by the saving grace of caution.

This national tendency to be cautious more than once in our history has compelled retirement from adventures that might have advantaged others as well as ourselves. Undoubtedly, it has militated against application of that continuity in foreign policy so warmly and sincerely advocated through many generations of our people. We are a co-operative nation with a strong distaste for that meddlesome mood which seems to afflict most foreign ministers and which has found free expression in all European states, Switzerland alone excepted. The revolt against Mr. Wilson's usurpation of plenary powers in the management of our foreign business was a natural manifestation of a national American tendency. We are not unwilling to co-operate with other nations but that co-operation must express the co-operative will of the commonwealth. We must know first just where we are going.

Unless I am very much mistaken, President-elect Harding, the United States Senate and the American people will want to know where we are going before they will consent to approve by application certain commitments of Far Eastern policy that may be passed on to the new administration by Mr. Wilson. Apart altogether from the principle and the national tendency, a reasonable and natural regard for the security of his party will undoubtedly incline Mr. Harding to ask some pertinent questions. When we found "what we were being let in for," we spurned the Versailles Treaty. That was inevitable. It was predicted. Nothing is more absurd than to assume that, after challenging Mr. Wilson's right to ignore the Senate in the formation of foreign compacts, Mr. Harding will be disposed to follow in the footsteps of his august predecessor and to be bound by that predecessor's bargains. Whatever he may do, he will not do that.

Americans in the Far East, Europeans and Asiatics will do well to bear this governing fact in mind: the incoming administration will reject any foreign policy or bargain that cannot survive searching scrutiny by the United States Senate. We are not unwilling to co-operate towards a restoration of world order, we are still anxious to play a worthy part in assisting Asia to self-development, but the United States Senate may be depended upon to see

to it that we are not made the catspaws of any foreign nation, or group of foreign nations.

A man owes his first duty to his own country. A worth-while world order cannot be attained by destroying nationalism before internationalism manifests fitness to take its place. The pathetic Russian advertisement has not advanced the cause of internationalism. The Paris covenant did not advance the cause of internationalism. Naive arguments could not overcome either the one-sixth card of admission flung in the face of the American commonwealth or the taunt of national inequality cast in the teeth of Japan. Co-operation is possible only among equals.

On the one hand we are told that we ought to go to war with Japan and on the other hand we are told that we must underwrite a financial-political insurance policy for China. Obviously, of course, if a Japanese war confronts us, we will be well advised to keep our money at home and avoid picking a continental Asiatic battleground. There is food for Senatorial reflection in this American-Asiatic prospect. Senators might be excused for suspecting an invitation to an unwelcome war in a two-faced proposition of that sort. Something is wrong. Let us see just what it is that is wrong.

China needs help. That is true. China is entitled to American help for the same reason and in the same spirit that governed our too generally forgotten intervention in aid of Japan. What can we do to help China?

We were able to help Japan because the Japanese were disposed to help themselves. We shall be able to help the Chinese as soon as the Chinese manifest a disposition to help themselves—and not an hour before that spirit of nationalism moves China. The Chinese may but we cannot make a nation out of China. To-day, throughout the greater part of China the most significant fact is Chinese contempt for any phase of Chinese authority. The one thing, seemingly, that the Chinese Republic has done for China is to consume the remnant of respect for authority that was left over by the Manchus. The masses of the Chinese people are not to blame for this sorry state of affairs. A succession of corrupt, inept, utterly selfish, unpatriotic Chinese officials has disgusted the mercantile classes and common people with all forms and phases of Chinese government.

China, to-day, presents the most huge human problem ever flung on the doorstep of civilization. It is a many-sided problem, appealing with peculiar force to Americans because it does present a challenge to American courage and generosity. We ought not to quit in a huff or a panic without seeing first what we can do to help a full quarter of humanity blundering hopelessly in the midst of national peril. Assuredly, if we can help to pull China out of the rut of political rottenness we shall have done something worth while.

The difficulties in the way of helping China are appalling. Let us take an impartial look at them. First, let us look at the purely international difficulties—the attitude of the European states, for example.

As I write, the Russians have attacked the Chinese in Mongolia. That was to be expected. The long frontier from the Amur to Turkestan is ominous with dark shadows of many future wars between the Yellow Men and the Russo-Asiatic heirs of Yermak and Muraviof Amursky. In considering this single aspect of the Chinese problem members of the United States Senate will do well to run through the candid pages of "Vladimir" (*Russia on the Pacific and the Siberian Railway*) and to read very carefully Mr. George Bronson Rea's citation of present-day facts in *Japan's Right to Exist*. Are we willing to guard this long frontier of the Yellow Men with our blood and with our bullion? In order to save China, do we desire to fight Russia? We might have to do that.

The average American will honestly answer: "That is not necessary. All we have to do is to give the Chinese what they need in order to make them able to fight their own battles." Excellent! Now, what do they need in order to be able to look out for themselves? Modern weapons? Training? Organization? They seem to need more than that.

I put this question recently to an American who has lived a lifetime in China and who is deservedly popular among the Chinese. What was his answer? Here it is, just as he gave it to me:

"I don't think the Chinese will ever be strong enough to stand up by themselves. They are not a military nation. Train them as much as you like, give them all the arms in the world, yet a



comparatively small force from any of the fighting nations would easily disarm and conquer them. The predominant strain in the Chinese people is a pacifist strain. It has absorbed a succession of military conquerors without producing a single fighting man worth while. The salvation of China will have to be sought in international willingness to protect Chinese pacifism."

That was a jolt to me. I admit a real fondness for the Chinese; but, coming almost direct from the *fiasco* of Paris which proved the vitality of the old Adam of annexation and subjugation, I wanted to believe in a China willing and able to fight for herself. European states do not seem disposed to overlook fat fields for future absorption. What guarantee is there that European states will really co-operate with us to protect a pacifist China? In self-defense, we must ask ourselves that question.

France has just secured a new Laos agreement. It would be interesting to examine that instrument and I think the American Senate would be entertained and informed if Prince Charoon or Dr. Kosha explained its meaning to the bulwark of our co-operative union. The Anglo-French "nutcracker" seems to be in good working order down in the kingdom of Siam. So far, every agreement that Siam has signed with either England or France has manicured the "white elephant" to the aggrandisement of her European aggressors. Is the character of the new Laos agreement an American inducement to accept France as a partner in the protection of China?

Lord Curzon is said to be an active participant in the moves now being made to tie America politically to the shirt-tail of European policies in China. Lord Curzon has improved upon Lord Grey's aggressive policies in Tibet and Persia. Lord Grey's Tibetan policy was developed, step by step, with Russo-Japanese moves in Manchuria and Mongolia that earned strong American condemnation. Are we to be asked to beam upon one aggression and to frown upon another? The American answer to that question need not be stated.

One of the things that strikes an impartial American observer in the Far East is the inclination of many good people to look at a very ugly prospect with one eye open and the other eye tightly closed. When Japan is concerned, the open eye is turned upon her admittedly short-sighted blunders and the closed eye is reserved for her European and Asiatic provocations. That is not an American attitude. We need both our eyes, wide open, just now in China, unless it is our desire to stalk blindly into trouble. The probability that our caution, however it may be maligned as a national tendency, will protect us even if at the eleventh hour. For our own sake, as well as for China's sake, we cannot afford to be made the cat-paws of annexing powers in Asia. That might be our fate but for the fact that we have a President-elect who has won his campaign as the champion of co-operative American government and who believes with the American majority that a worth-while world order will be best attained by thinking and planning for America first. There is no golden road to self-government, especially in Asia, just now, where the whole outlook has been changed by the Russian *debacle* and the pages of history turned back to days of Demetrius Donskoi and the collapse of the Golden Horde. If China is to be saved, there are many who think that she will be more likely to find her salvation in an Asiatic alliance—co-operation along the lines of our own commonwealth—rather than through an occidental receivership that might repeat on a vast and ghastly scale the repulsive story of Samoa.

## Our Own "Little War" in Mongolia

PEKING, November 22.—The American relief party returned from Urga this afternoon, accompanied by Mr. Mills, an American engineer, Mr. Izeo, the Japanese military agent, Baron Fittinghoff, his wife, son and daughter, and several others. Mr. Miles (a British subject), Mr. Green and Mr. Olafsen (Danes) and 11 Japanese are the only foreigners remaining at Urga.

The new arrivals confirm the main details of the Chinese reports of fightings on October 24, 26 and 28, and a heavy engagement on November 4. Altogether 20 minor engagements and five major ones have taken place.

When the party left Urga on the 17th inst., enemy shells were falling at Anolika, 12 miles to the east of Urga. The attackers

are led by Russian officers, and consist mainly of Mongols, Buriats, Japanese and probably some Chinese. It is believed at Urga that Baron Ungern is directing operations. There are but few Russians among the rank and file. The original strength was about 2,000, but probably this number has been doubled by reinforcements.

The Chinese have also been reinforced by 2,500 Chinese infantry and cavalry from Mimicheng (Kiakta.) A further attack upon Urga is expected, the outcome of which is doubtful. The position of the Russians left at Urga is most pitiable.

Baron Fittinghoff is very ill, and if he had not been removed he would certainly have died. All the leading Mongols at Urga are under restraint, including the Hutukhtu. The party speak in the highest terms of Mr. Mills's refusal to leave without Baron Fittinghoff and his family, while his house was under shell-fire and he was in other constant dangers, although there was nothing to prevent his own departure.—Reuter.

## The Coventry Exhibit at Olympia

AT the Machine Tool Exhibition recently held at Olympia, London, the Coventry Chain Company, Limited, was represented by an exhibit that attracted much attention from experts. The accompanying photograph shows the practical demonstration given to the tool men of three of the Coventry specialties:—

"The Coventry" inverted tooth (noiseless) high speed power transmission.

"The Coventry" single and duplex roller chains for industrial drives where the speed is not so high and

"The Coventry" reduction gear boxes, which are made in duplex, triplex, and quadruplex, for full range of horse powers and ratios.

Thus, in a single exhibit, the three different Coventry transmissions were shown in motion together. There was a large attendance of foreign and overseas buyers.





## Just About People

ULTIMATELY, the relations between Japan and China will depend upon the Japanese and the Chinese themselves. If the Japanese do the things that they should do to win the confidence and friendship of the Chinese people, no amount of alien intrigue can perpetuate enmity or suspicion. The Chinese are not lacking in a spirit of good sense and justice. They will not pin their faith to Asiatic disunion unless acts and utterances of Japanese sustain alien-born suspicions and prejudices. In the final analysis, Japan is the master of her destiny and to a very large extent she will be accountable for the final fate of China.

In every nation and every clime, there are all sorts of people. No nation possesses a monopoly of nice, or of nasty people. The character of a state is governed by the extent to which nice or nasty people control its relations with other nations.

Beyond any doubt, one of the chief difficulties confronting Japan in China is begotten by the proportion of irresponsible Japanese who have done their worst to earn a bad name among Chinese and foreigners. For the most part, they are undisciplined youngsters or riff-raff recruited from the lowest elements of the Japanese people. That Japan should be judged from such dregs of her teeming population is unfortunate and unjust; yet her situation in this regard is not different from that of any of the western nations that have come into contact with Asia and Malaysia. Before the opening of the Suez Canal, in the very earliest days of western contact with the Asiatic countries, responsible writers testified to the bad effect caused by rough, drunken sailors who richly earned the *sobriquet* of "foreign devils." They were devils, indeed; some of them. After the opening of the Suez route, Spaniards in the Philippines lamented the loss of respect caused by "an influx of European vagabonds." After our own pacification of the Philippines, Mr. Taft and other respectable Americans openly and vehemently charged that America's work and reputation in the islands were being blasted "by corrupt, corroded, alleged Americans." Later, our home government had to give very serious consideration to the character of certain unrepresentative Americans on the China coast. These things had to be dealt with, and it was very difficult to deal with them. Even the careful and (to their credit) successful British have been compelled to act sternly at times to protect the honor of Britain in the East.

In Siberia, in Manchuria and in Mongolia, Russia was never successful in dealing with this problem. In many parts of the Chinese borderland, to be mistaken for a Russian is not conducive to self-respect or peace of mind. That is highly annoying to the admirable and in every way congenial Russians that one meets in the East.

It is well to remember these facts when considering Japan's vexatious problem—the obnoxious, strutting, enmity-breeding, lower-class Japanese in China. Japan must take them in hand. For her own sake, she must discipline them or weed them out—preferably by the scruff of the neck. Japan will never make any

headway in China until she cleans out her disreputable element. Meanwhile, remembering her special difficulties, her critics should be tolerant.

These remarks are suggested by the visit to China of Baron Y. Fujimura, a Japanese gentleman who has earned a high place in Chinese and foreign esteem. The Baron is in the Japanese House of Peers an influence for good very much along the line of Albert Beveridge while in the United States Senate or Lord Randolph Churchill while he was leading "the Fourth Party" in the British House of Commons. He is a notable member of the numerically small but individually influential *Koseikei* group. He was the first Japanese member of the Shanghai Municipal Council and his old friends of the American and foreign clubs were glad, indeed, to welcome him back among them. Of course, he was hospitably entertained. As the manager of the Mitsui interests at Shanghai and at London he made a wide circle of the best of foreign friends who respect his sound judgment as much as they admire his sterling character.

Baron Fujimura came to see for himself what Japan is doing in China and how she is regarded by Chinese and foreigners. It is no exaggeration to say that he has collected more accurate information than has been available to any Japanese visitor for many years. He made it plain that he desired to learn the truth—what is behind this clamor against the Japanese? He talked with all sorts of people; to be more correct, he induced them to do the talking. His visit is sure to be fruitful. Its results should be an inducement to other representative Japanese to come to China and help along the good work of improving Sino-Japanese relations.

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MR. John George Leyner, of Denver, Colo., was killed by an automobile accident near Denver, recently. Mr. Leyner was an American genius of exceptional ability, a pioneer in rock drilling and mining appliances and an inventor who has contributed much to the industrial progress of his age. No man in fact has done as much in the past generation to advance the art of removing rock. Through his inventions the rock drill has passed from the percussive stage, involving machinery of heavy weights, to the hammer stage, where the rock drill has become a thing but little larger than a pneumatic tool. To Ingersoll, Joseph Githens and Sergeant belongs

the credit for the development of the percussive or piston type of rock drill. During this development, and up to an early period following 1900, engineers considered it impracticable to build a rock drill on any plan other than that involving a rigid and direct connection between the steel carrying the bit and the piston; that is, the drilling bit was an extension of the piston rod. To make a rock drill on this plan and reduce its weight to a point consistent with practical handling in mines and stopes, to simplify it in its mechanism, and to make it stand up against hard usage, were problems that taxed the best energies of inventors between 1870 and 1900. Henry C. Sergeant came to the front and is the recognized leader in the perfection of the piston type of drill.

Mr. Leyner was the first to attack this system. He pointed out what was generally admitted, that the piston type was necessarily heavy, that it was limited in drilling capacity, because of the limit to the number of strokes it could make, and he advocated and patented the use of the piston as a hammer only, to strike the end of the steel or an intervening medium connected with the steel. He introduced a water jet through the piston into the bit for clearing the hole cuttings. His system



BARON Y. FUJIMURA





The Late John George Leyner.

patent was taken out in 1903 and his method patent in 1904.

Incorporating the Leyner Engineering Works in 1902, Mr. Leyner built shops at Littleton, Colorado, soon thereafter. Engaged as he was in pioneer work, developing a new and radical principle in the art of drilling, he encountered many obstacles, mechanical and financial. To build a drill on the Leyner principle required not only superior excellence of design, but the material and workmanship, unless of the highest quality, would naturally result in breakages and excessive wear and tear. For a period of 12 years, in

spite of difficulties and successful attacks made upon his drill by the old and leading companies, the Ingersoll-Sergeant Drill Company and the Rand Drill Company, Leyner stuck to his guns, until in 1911 the Ingersoll-Rand Company took over all his patents and inventions, transferred the manufacture to their works at Phillipsburg, and the Leyner-Ingersoll type of drill was from that time a standard. It has often been said that all that the genius of Leyner required was the experience and mechanical skill of the Ingersoll Company to make a success of this new principle. The Jackhammer, which might almost be placed in one's overcoat pocket, is built on the Leyner principle. This is the most generally used rock drill of to-day, not only in America but throughout the world. The water Leyner, now known as the Leyner-Ingersoll, is now widely used, replacing entirely the old piston type of drill for mining and tunneling. It holds the world's record for fast tunnel driving.

Mr. Leyner's other inventions include the drill sharpener, now recognized as the simplest form of sharpener and the one most widely used throughout the world. It has been estimated that this sharpener is used for sharpening about 90 per cent. of all the machine sharpened steel in the world. Leyner also invented the Little Tugger hoist used in mines and shipyards. He built the original machines used for producing shredded wheat. His latest invention is the "Linapede" or Leyner Farm Tractor. He was engaged in the development of this tractor at the time of his death.

The mining industry owes much to Leyner's genius, the world much to the mining industry. To have reduced the cost of removing rock and ore, as Mr. Leyner has done, is an achievement which should place him at the front among America's great inventors.

### The Passing of Another "Old China Hand"

THE grim reaper removed from Shanghai, on November 1, a distinguished "Old China Hand," a fine scholar, a courtly gentleman of the old school, an admirable American—Thomas R. Jernigan. They have buried him, according to his wish, on the mount overlooking Nanking, where his dust will await the final awakening of the Chinese and all the other children of men. May his soul rest in peace!

As American consul at Kobe and Shanghai, Mr. Jernigan was a popular and respected figure among the Asiatic and foreign folk of an earlier generation. As lawyer and writer and philosopher, he did credit to his country and service to all. He was, in the best sense, a friend of China and a good American citizen; always patient



The Late Mr. T. R. Jernigan

and generous to a fault. It was not in his nature consciously to injure any man; yet he had strong convictions.

He was never worried about China. "Leave her alone," he would say; "she will get along all right when our people understand her." He was worried about the present Asiatic situation, although he believed that reason would rule in the long run. Shortly before he died—within that very week—he talked over the more acute angles of Asia with the editor of THE FAR EASTERN REVIEW. He suggested some thoughts for a just, constructive appraisal of present doubts and difficulties which he consented to to put on paper for THE FAR EASTERN REVIEW. Before he could carry out his intention, death took him. He will be missed.

Among the numerous tributes paid to his memory not the least in interest was that of Mr. Wu Ting-fang, who spoke as follows at the requiem proceedings of the Far Eastern American Bar Association, November 8:

"I come here on this occasion to speak on behalf of my countrymen and also personally. I remember over twenty-five years ago, on my way to your country as minister for China, I passed through here and found Mr. Jernigan consul-general. From inquiries I made, I found he was most popular not only among the foreign community but among the Chinese. To my country he gave the best of advice and when I was in America I learned with regret that his term of office had expired. On my return from America I was glad to renew my acquaintance with him and on many occasions when I saw him I found that he was doing great service not only in his legal capacity, but as a friend of China. Although recently he was not in the best of health I thought he would live for many years more, but now I am sorry to say that he has left us. It is a great loss not only to China, but also to the friends who knew him. Being a theosophist and knowing that this is only a temporary life, although I miss him here, I hope to see him in the other world. No doubt now having spent his life in an honest, straightforward manner, he is happy in the land beyond. Still as he has gone we miss him and I endorse the words of the resolution."



# The Far Eastern Review

A Monthly Review of Far Eastern Trade, Finance and Engineering, Dedicated to the Industrial Development and Advancement of Trade in Far Eastern Countries

ENGINEERING FINANCE COMMERCE

5 JINKEE ROAD, SHANGHAI, CHINA

Telegraphic Address: Farview, Shanghai

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## Mr. Lamont's Timely Remonstrance

"AS FOR JAPAN AND THE CHARGES THAT JAPANESE MEN OF BUSINESS ARE SHARP AND UNTRUSTWORTHY, 'FORGET IT!' IT IS NOT SO. THE JAPANESE MEN ARE NOT AS FRANK AS WE ARE. THEY WANT TO BE BUT DON'T KNOW HOW. FOR GENERATIONS THEY HAVE BEEN TAUGHT RESERVE. BUT I WANT NO HONESTER PERSON TO DEAL WITH THAN THE JAPANESE BUSINESS MAN. AS FAR AS HE ALONE IS CONCERNED YOU CAN WELL AFFORD TO TRUST HIM AND ENTER INTO IMPORTANT RELATIONS"—MR. THOMAS W. LAMONT, CHAIRMAN OF THE CHINESE FINANCIAL CONSORTIUM, TO THE AMERICAN MANUFACTURERS' EXPORT ASSOCIATION—THE MOST IMPORTANT ORGANIZED BODY OF AMERICANS ENGAGED IN FOREIGN TRADE.

Excellent advice, timely remonstrance, Mr. Lamont! The American state department and the foreign offices of England, France and Japan having announced their approval of the acts of the October consortium conference at New York, it is gratifying to find the chairman of the consortium standing up manfully and publicly for fair play to Japan and the Japanese. That is the way to start the consortium right, to adjust the international mind so that the four powers may be put in a position to help China along practical lines, to end this dangerous era of suspense and suspicion in the Pacific. All that the Japanese ask, need, or are entitled to, is fair play. They are not getting that. Mr. Lamont can help them to a square deal. Evidently, it is his purpose to do so. American business men in the Far East (and friendly European business men, too) will back his strong hand. It is the just, the prudent and the profitable thing to do.

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## "Stabbing American Business in the Back!"

IT has come to a sorry pass in Far Eastern international relations when large bodies of undoubtedly excellent and usually sensible people interpret as "Japanese propaganda" the least friendly word or reference to Japan. Men of high standing and proved probity in the American financial and business world have been assailed as "Japanese propagandists" because their minds did not choose to go along with the minions of Trotsky in Shanghai. Now, the inevitable reaction is setting in. Even in Shanghai, the chosen home of the war-makers of the Pacific, contrition is coming with reflection. The organized effort to knout the Peking government into rejection of the consortium proposals has taught important Americans and foreigners a needed lesson. The threatened general boycott to buldoze business has opened many eyes. Now, who was right? Now (it is pertinent to ask) who has been "stabbing business in the back," not only American business but all legitimate foreign business in China?

For the greater part of a year, THE FAR EASTERN REVIEW has been secretly and openly boycotted at the behest and in the selfish interest of dangerous professional agitators. American manufacturers have been told weird stories by the representatives of would-be competitors who have not scrupled to resort to the most underhanded means to undermine the flagship of American business in Asia. The same thing has been attempted in England and in other parts of Europe. We have not whined; we have

gone steadily along, minding our own business, and we have prospered—thanks to loyal friends. We knew that we would win.

While new in its present temporary affiliations, the attempt to injure the prestige of THE FAR EASTERN REVIEW is by no means new. To honest competition or criticism, no sensible publisher has any objection. Here is an illustration of the foul methods that have been followed, from first to last, in the unsuccessful attempts to injure THE FAR EASTERN REVIEW:

While the war was entering upon its final stage, with America bending every effort to sustain our Allies, a Shanghai publisher who had merited and received the censure of British officials in China appeared suddenly in Washington. The publisher of THE FAR EASTERN REVIEW was in uniform at Chaumont. The present editor was a volunteer war-worker in Washington, working on Far Eastern matters pending orders from the war department. The Shanghai publisher informed the present editor of THE FAR EASTERN REVIEW that "The REVIEW has been sold to the British." As it happened, the present editor was well informed as to the actual status of this newspaper and he remonstrated with the Shanghai publisher for circulating such absurd reports. "Maskee," insisted the always positive man from Shanghai; "I know, I tell you! I've just reported the fact to General Churchill and Will Irwin. Why, it's been printed in the *Daily Commerce Reports*! Will that convince you?"

It is a regrettable fact that the Bureau of Foreign Commerce was hoaxed by the anti-Allied mischief-makers. Only those who saw the actual war-making at Washington, from the inside, realize the sinister enemy influences with which our government had to contend. We tell this story, now, not at all to humiliate the author of the report but to open the eyes of Americans and Britons who believe in fair play and a proper regard for Anglo-American friendship.

The present campaign against the Japanese is very similar to the campaign that was waged against England during the war. The anti-English campaign has been neither a failure nor a success. It has done much mischief. It will be weakened or strengthened according to the consequences of the present anti-Japanese campaign; because, if we get together in China we shall learn how to pull together in other matters, and we cannot get together at all on an anti-Japanese basis. Americans at home will never stand for that.

As there was no truth in the assertion that "THE FAR EASTERN REVIEW has been sold to the British," neither is there a syllable of truth in the mean gossip that "THE FAR EASTERN REVIEW has been sold to the Japs." The ownership of the REVIEW is absolutely and wholly American. This newspaper insists upon a square deal for our British and French friends in the Far East. In that respect, it shares the view of the late Willard Straight, who regarded American war-profits as "a sacred trust gained from the blood of our friends." We have been proud to lead the way in demanding a square deal for our Japanese friends, and we have been cheered by the number of splendid Chinese who have quietly rallied to the support of this policy. That is a good omen for China.

In line with our basic policy of telling all the truth, may we say just a word about Japanese "reserve?" We hold no brief for the Japanese. We do think, however, that it will be well for all of us if we shake off the habit of dividing people into saints and devils. No people on earth has a monopoly of either good or evil. We are all, equally, children of Providence, as Cy Warman sang:

"Gichi manitou, the mighty!  
"Michi manitou, the bad!  
"In the heart of every red man,  
"In the dust of every dead man,  
"There's a little bit of gichi  
"And a mighty mound of michi—  
"There's the good and there's the bad."

Yes, "there's the good and there's the bad" and there is both good and bad in Japanese "reserve." Yet, the Japanese did not lack candor when Commodore Perry was opening their islands to the world. Let those who seriously desire to understand the whys and wherefores of Japanese distrust read the old records, the official chronicles of the early period of Japanese modern development. Who taught the Japanese to "say nothing and saw wood?"



## China—A Slave To Old Customs And Superstitions



("Shun Pan" Cartoon)

We did it. Great Americans like Grant and Harris and Bingham and Dennison, and great Britons like Sir Harry Parkes and Kenny, protested and tried their best to prevent the evil that happened. It ill becomes western censors to condemn Japan for being an apt pupil of western monitors. It is the wrong sort of lead in China, where western diplomacy is likely to need all the prestige and intelligence that it can bring to bear upon formidable forces for weal or for woe.

\* \* \*

## Our Christmas Gift to Germany

THE war is over. Let us have peace. The British and the Chinese seem to be strongly in favor of forgetting our late unpleasantness with the Germans. That is sensible. It is business-like. We are for it. Unless anticipated by Mr. Wilson, Mr. Harding will undoubtedly give us a formal and legal declaration of peace with Germany. We have a shrewd suspicion that the last American soldier will be ordered out of Europe within an hour after Mr Harding's inauguration.

Let us have peace and confidence and friendly business relations. Let us be decent to the Germans and fair to ourselves. We need not present the Germans with a billion dollars' worth of business in Japan. We are doing that, just now.

American manufacturers have built up a vast and profitable engineering trade with Japan. The strength of the bonds that bind these two nations together is shown in the American participation in supplying the requirements for the South Manchurian railway. It is demonstrated in the monopoly American electrical material enjoys in erecting the big Japanese hydro-electric plants. It is visible on all sides wherever the Japanese have carried their influence. It has cost nothing. Our manufacturers have not spent one cent in advertising for it. It came to them unsolicited, the spontaneous recognition of our superiority in these lines and a testimonial of Japanese friendship and goodwill. Who will benefit by destroying this bond? Who will take advantage of the

ill-will and hatred that must surely give place to deep-rooted friendship and admiration if anti-Japanese agitations continued? Stop, and think it over!

And then read the following editorial from the *Yorodzu Choho*, one of the leading vernacular dailies of Tokyo and the chief champion of our allies during the war:—

"Though there is no manner of doubt that the anti-Japanese agitation in America is due to racial hatred, some Americans say that it is an economic question. We know it is futile to dispute the point, and may regard the matter as an economic question. The 'white Australia' principle may also be regarded as actuated by economic considerations. Let us remember, however, that when discrimination, persecution, and exclusion of our nationals have been carried out, steps will be taken to discriminate against our trade and persecute and exclude it. An inkling of this probability is already furnished by the fact that Britons and Americans in China are taking steps disadvantageous to Japanese trade. It should be noted that in places where we are now being excluded, it will be the turn of our trade to be excluded next.

"We can only meet the situation by developing our industry and shipping and promoting our trade in countries where we are not persecuted. We are not necessarily deficient in natural resources. Experts predict that coal will be exhausted before long, but we are abundantly provided with water power which may be termed 'white coal.' The only thing in which we are short is scientific knowledge. In this connection let us note the recent speech of Dr. Solf that Germany is in a position to supply Japan with scientific ability. If Germany can supply our want, why should we hesitate to shake hands with her?"

We repeat, who will benefit from this anti-Japanese agitation carried on in China? When German brains displace American engineering talent in Japan, where will the American manufacturer find the same profitable market for his products in the Far East? *The Germans are back on the job.* They are attempting to realize on the vast amounts expended in propaganda in the past. The time is propitious quietly to work on the sentiment of the Japanese to cut the friendly bond with America and to bring the Japanese under the guiding direction of German genius. Who has made this situation possible?

Who is stabbing American business in the back?

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## Playing America Against Japan—that Vanderlip Concession

ON October 25, press dispatches brought the news that a Mr. Washington Vanderlip, representing a group of Pacific Coast financiers, had concluded an agreement with the soviet government in Moscow for a term of seventy years for the lease of territory in Eastern Siberia. The lease is understood to cover a vast empire east of the 160th meridian and including Kamchatka, about 400,000 square miles in all, with exclusive rights for the exploitation of oil, coal and fisheries. Mr. Ludwig Martens, the soviet representative in New York, was officially informed from Moscow by Tchiterin of the signing of the agreement and that the syndicate would probably become the fiscal agents of the soviet government in America for purchases up to half a billion dollars. We were also informed that Secretary Colby declared Vanderlip to be an agent of Senator Harding. This miserable political libel brought forth an immediate and effective denial from Mr. Harding. Mr. Frank A. Vanderlip also crushed the "Covenantors'" canard and his statement was followed by one from Mr. Harry Chandler, publisher of the *Los Angeles Times*, who said that he and twenty-five others were associated in the enterprise and that operations for the present will be confined to an exploration of the resources of the territory included in the concession.

It is gratifying to learn that the state department lost no time in announcing that, inasmuch as the United States has not recognized the soviet government, no contract made with its officials can be binding, repeating its warning of July 27 last. The soviet government was fully cognizant of Japan's treaty rights in this territory, and of the fact that the Russian treasury had been enriched to the extent of many millions by the payments of Japanese for fishery rights as provided for in the Fisheries



Convention between the two countries of 1906. It is simply another instance like the Siems-Carey railway contract in China, where the American was handed a gold brick—a contract for lines that could not be built.

China has had to pay the penalty for taking advantage of an over-enthusiastic American business-man, and from now on will have to deal through an international consortium, which is in no humor to be flimflammed. There is every reason to believe that Mr. Washington Vanderlip and twenty-five associates have been similarly buncoed by Moscow, in the hope of creating further friction between Japan and America. The secretary of state, having the exchange of notes with Japan on Saghalien and the Ohkotsk Sea, fresh in his memory, did not require the services of a Far Eastern adviser to urge him to immediate action. The American government and people cannot always be placed in the position of seeking trouble throughout the world, by sustaining the activities of concession-hunters who refuse to be guided by international laws or treaties, or respect for the rights of others.

The Japanese foreign office has also made its position clear and in an official *communiqué*, on this concession, on October 28, says:

"There have been several rumors, of late, current here regarding American activities in Siberia, but most of these, on examination, have proved to be without foundation. In view of the source from which the present news arrives, there appears to be some truth in it. The American state department is reported to have declared that, pending the formal recognition of the Russian government, such an agreement must be regarded as null and void. This declaration must be interpreted as a denial of the government's responsibility to protect the rights and the concessions obtained.

"The soviet government has often had occasion to offer its natural resources for the free exploitation of foreign commercial people. The subjects of these powers have, however, hitherto taken no positive steps, as it was plain that, in making the offer, the soviet government, was aiming at establishing commercial intercourse with the powers, and thus have them recognize the soviet. Under these circumstances, it may be not quite off the mark to conclude that, if the agreement reported was really concluded, it is only a bait thrown in the way of the United States by the soviet to have America recognize the present Russian government.

"It seems that Mr. Vanderlip has concluded the agreement, in view of the presence and the activity in this part of Siberia of different groups of foreign rival capitalists who all have the same ambition. It must be noted, however, that fishing rights in this region are already Japan's, having been secured by her through the Fisheries Agreement, concluded and renewed some time ago by the Russians and the Japanese. The only way for the Americans to invest in these fishing enterprises, therefore, will be to give financial aid to the Russian fisherman and thus enable them to defeat the Japanese in competition."

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## American ("Nick Romanof") Miners in Mongolia?

**H**ARDLY have we had time to digest the meaning of the Vanderlip concession in Kamchatka, when the report comes from Peking that Russia has conceded to another American syndicate the right to work gold mines in Outer Mongolia, and that fifteen Americans recently set out from Peking bound for Urga. There is every evidence that Americans are active in Outer Mongolia, and there is no denying the presence, there, of a party of mining prospectors. If the report is true that Russia has conceded mining rights in Mongolia to Americans, then it is a clear case of another gold brick being handed to over-confident individuals who refuse to be guided by the advice of their government. A Russian concession to work mines or any other enterprise in Outer Mongolia is not worth the paper upon which it is written.

About eighteen months ago, a tall, blond young man appeared in Washington, D.C., attired in the uniform of a Cossack captain. He was a soldier of fortune with the significant name, Nicholas

Romanof. Captain Romanof will be remembered by Americans in the Philippines as a very interesting young man with a respectable dash of adventurous spirit who volunteered for service when the call came. He accompanied the American contingent that went first from the Philippines to Vladivostok. He did good work as an intelligence officer. Fortune and special orders cast him into the tent of Hetman Semionof. In Washington, he let it be known that Semionof had sent him to America on a special mission to barter the mines and movables of the Hutukhtu of Mongolia for good gold dollars, munitions and food. Captain Romanof was kind enough to tell his story to the editor of THE FAR EASTERN REVIEW.

He declared that "Semionof had it in for the Japanese"; that "the Hetman was a George Washington with modern improvements" and a fine eye for business opportunities. Semionof's idea was that Russian dash, Mongolian resources, American dollars and American engineers should be pooled to make "a great white man's empire" alongside China. He wrote on his typewriter a full report for a high officer of our war department, and he had a friendly hearing—particularly among the international confidence-men then infesting the American capital.

"The Hutukhtu," he said; "is a fine fellow. He likes American rye whiskey"—Washington, alas, even then was (partly) "dry"—"and he's very fond of poker. He plays poker with Hetman Semionof for mines and other things."

Romanof was not looking for publicity. He was out after the hard coin, and he made good on the matter of credentials. His song was: "Detach Semionof from the influence of the Japanese! The Russians merely await the day for *rasplatiati* ("the reckoning"). They all hate the Japs."

It will be interesting to learn if Nicholas Romanof has landed his tarpon. This Mongolian mining story looks like a fish out of the self-same pond.

*Mongolia belongs to China.* It may have declared its independence, accepted the protection of Russia, and later repented and returned to China and "Little Hsu." Russia may have sent her agents there to boss the show, but Mongolia is an integral part of China, and any agreement signed by the Russian government, conceding rights in this territory, is invalid. Some day the world will face a "show-down" on the status of Mongolia, and it behoves all sensible Americans to consult very fully with the state department or the Legation in Peking as to whom they should do business with, before plunging into deep water. If they are advised to deal with China, as they undoubtedly will be, they should remember that, some day, Russia will dispute their rights; and when the issue is raised, if they are stranded away off in the hills of Karakorum, or the Altai slopes, our candid advice is to remember Mexico, stretch a barbed wire entanglement around their properties, erect block houses, dig trenches and prepare to fight, or keep a few aeroplanes always in their hangars, tuned-up to make a quick and safe getaway.

If Americans are now operating in Outer Mongolia under a concession signed by any of the many Russian governments, it is high time that the state department should make public its position on the status of this part of Asia. Until the matter is definitely settled, Americans can operate concessions in Mongolia only at their own peril.

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## A Square Deal for Canton

**T**HE Chinese constitutionalists leaders—Dr. Sun Yat-sen, Dr. Wu Ting-fang and Mr. Tang Shao-yi—have answered the summons of their progressive colleagues of the south and have gone to Canton with the expressed determination of giving China a practical example of representative, orderly, stable government, which may serve as a model for the rest of the Chinese republic. International prudence, decency and self-respect require that these earnest men be given a square deal. Canton must have a fair chance. If Peking cannot, or will not lead China, Canton may; and it is neither the province nor in the interest of foreigners, Americans included, to dictate to the Chinese by whom or from where they shall be governed. What we all want and need is a representative, orderly, stable Chinese government. Without that, the consortium cannot safely function. Without that, the Chinese,



in the mass, will have little or no faith in foreign protestations of friendship. THE FAR EASTERN REVIEW wishes Dr. Sun and his associates a hearty godspeed and will do its part to see that their cause secures fair play. The whole story of Canton's struggle for a really reformed Young China has yet to be told. It contains many fine pages and not the least wholesome or remarkable is that which has led up to the present southward mission of Dr. Sun, Dr. Wu and Mr. Tang.

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## From Master to Servant

THE sovereign people have pronounced judgment and, as THE FAR EASTERN REVIEW predicted from the outset, Senator Harding has been chosen (the twenty-ninth American citizen) to serve the American Commonwealth as President. Merely as a matter of fact and in the most friendly and proper desire that all our Far Eastern friends may give due thought and credence to certain serious things that must be said, it is both permissible and advisable to remind our China Coast readers that we told them in July precisely what our fellow-citizens would do in November. Announcing in our July issue the nomination of Mr. Harding, THE FAR EASTERN REVIEW made the following statement:—

"The event of the month, in the Far East as elsewhere, was the nomination of Warren G. Harding as the next President of the United States. Barring death or a political miracle, that is about the size of it: in November there will be an election; and, in the cheerful spring of next year, President Harding will take over the management of the biggest individual business on earth."

In August, recording the nomination of Mr. Cox, we said this:

"They haven't a chance, nevertheless the Democrats are doing their level best to meet the challenge of the G. O. P."

Always, the result was a foregone conclusion, anticipated (to our knowledge) by every clear-sighted leader of the defeated, and defunct Democratic party. The party of Jefferson is dead—as dead as the League that killed it.

We say this with no tinge or taint of partisanship. It has ever been our belief that partisanship, either personal or political, is fatal to good editorship. To be useful, an editor must be free. He should be prepared at all times to criticize even his closest personal friends.

We are quite sure that there is not an American in the Far East who will not join us in the wish that the Master of All Mankind may give to the President who is closing his second quadrennial term in the White House a speedy restoration to health and many future happy years of useful life. Woodrow Wilson will loom large in the recorded history of his time. That he was great will be conceded, ungrudgingly. Unless we are greatly mistaken, the day will come when little boys and girls, learning to form their pothooks and hangers, will write from a copybook headline,

"A MAN MAY BE TOO PROUD TO FIGHT."

Posterity delights in queer revenges. It is an interesting fact of history that the phrase most familiarly linked with Lincoln's life as President was not reported by the newspapers that first recorded the great Gettysburg speech. The true worth of Mr. Wilson's work will be weighed and measured in the fulness of time; and humanity will profit largely if this great war President is spared to write his life's story in his own winsome way. He has much to tell that all the world should know; and he is, above all things, the master of the graceful phrase.

One night, before Mr. Wilson was nominated for the governorship of New Jersey, we met the then president of Princeton University. In the company was the late John Bigelow, one of the shrewdest and most lovable men of our time.

"There," said Mr. Bigelow, "is a man that many people love and some persons hate."

That has been proved true. Mr. Wilson has inspired ardent affection and bitter enmity. For ourselves, we have always liked him; and not the less because even most great men are comparative, while Mr. Wilson is positive. One of the wits of the Paris Conference remarked:

"God knew better than to put Wilson and Alexander in the same period of time. Still, it is a pity that he could not confront Philip's warlike son."

It was Mr. Bryan who forced the Democrats to nominate Mr. Wilson—not that he liked the author of "The State" one-half so well as he hated his own majority opponent, Champ Clark. After

the fateful convention of 1912, returning in the pullman from Baltimore, the "Commoner" declared to a group of friends:

"Well, we've nominated him. He'll be elected and when he leaves the White House the (Democratic) party will be split into factions."

The prophecy has been fulfilled. The Democratic Party is as dead as the League of Nations.

We have had "fathers of our country," like, Washington, Jefferson and Madison, big brotherly Presidents—Lincoln, for example—and masters like Jackson, Taylor and Wilson. Wilson was conspicuously the master—the *Schoolmaster*. Roosevelt, after 1904, was to a certain extent a ruler, yet with a qualifying distinction that made his "Big Stick" more loved than disliked. Never a demagogue, he had a most extraordinary knack of making the average man feel that he was the people's policeman, hitting out right and left when a Hearst or a "malefactor of great wealth" came between the citizen and "a square deal." The "Rough Rider" suited and satisfied his time. He was a man. Americans respond readily to a man. Theodore Roosevelt was a very great man. From breaking a bronco, writing a whole library of books, taking a man's chance as a soldier, circumventing an "Easy Boss" or raising a happy and healthy family to directing the affairs of his country, he did all things with a whole-hearted thoroughness that compelled respect and admiration. He loved to hunt big game because that is man's size sport; and those squirrel teeth bared as "deelightedly" to a hostile senator as to a Nairobi lion. He enjoyed every minute of the Panama contest on Capitol Hill; grizzly bear and senator, he thrilled through the task of bringing either, or both, to heel. He was a master, undoubtedly; but *neither a ringmaster nor a schoolmaster*.

Lovable, compelling in the finest way as Roosevelt was, he vexed the soul of dear old John Hay. Hay's private notes and letters ripple with humorous comparisons between "the Major" (President McKinley) and "the Colonel" (President Roosevelt). Mr. Hay was a professional diplomat without any peer in all the history of the American Commonwealth. Beginning as Lincoln's secretary, he had served an international apprenticeship from Madrid and Vienna to London before succeeding Judge Day as secretary of state. He had large views on international affairs, much personal knowledge of world politics and very decided opinions that conflicted with those of Mr. Roosevelt. Yet, they worked remarkably well together. That was a tribute to the manly masterfulness of Mr. Roosevelt and to the wisdom and the tact of Mr. Hay. They were both giants from the shoulders upwards, and, in the Senate, they confronted opponents worthy of their steel. Only the few now cast their minds back to Hoare, yet that fine old man had much to do with shaping America's destiny in the Far East. Quite a Plymouth Rock to cling to, was Mr. Hoare; and a hard and sharp rock to bump up against.

Mr. Roosevelt, a master-man, succeeded Major William McKinley. In the most complete and admirable sense, William McKinley was the servant of the state. Service was the keynote of his career. He loved to listen to other men, to be guided by men in whom he had faith; and he had a hearty respect for all men of good will, irrespective of their views on the most vexed political questions.

We had won the Spanish war and found ourselves in unwilling occupation of the Philippines. We did not know what to do with them. Self-interest, apart from the howls of hostile anti-imperialists, urged us to get out of the islands and Asia. Admiral Dewey, whose victory had landed us in Luzon, favored recognition of a Filipino republic. General Anderson and others of note advised against retention of American rule. Among those who formed the Republican opposition to the legacy left over by the Spanish-American treaty of Paris (1898-1899) was Judge William Howard Taft, of Ohio. Mr. McKinley, after listening to Mr. Hay, Mr. Hanna, Mr. Whitelaw Reid, and all who cared to offer their opinions, formulated his policy of "the Philippines for the Filipinos," arranged for the gradual withdrawal of military government over the islands, and sent for Judge Taft.

"I want you to go to the Philippines and set up civil government in the islands," said President McKinley to the big, genial Ohio judge.

"I am opposed to the retention of the Philippines," said Taft.

"That is why I want you to go there" said McKinley.

Taft went and made memorable American history in Asia.

He came first into Asia because McKinley was, above all things, the servant of the American Commonwealth; and, take him



all in all, Taft as President and the successor of the master-man, Theodore Roosevelt, was a notable servant of the American Commonwealth.

Once, some years ago, President Taft and Mr. Rea were discussing a distinguished American.

"You can tell a Harvard man," said Taft; "*but you can't tell him much.*"

Nobody who knows Mr. Wilson, either as professor or President, will question the statement that "you can't tell him much." He has always been as stubborn as a mule, positive as—a professor.

"President Wilson has a heart of gold," said Mr. Clemenceau, while the President was in Paris.

"Yes, and——?"

"A head of wood," snapped the droll "Tiger."

Mr. Wilson, as President, could not divest himself of the minatory manners and methods of the oracle of the class-room; unconsciously, no doubt, he continued to be the Schoolmaster. Even some of his pet pupils grew tired of going to school. The urge of

the American Commonwealth will soon be so happy that school-time will seem far in the background of our lives and quite a pleasant memory. We had to go to school in order to get a Harding. We have graduated, successfully; so, as we hand over the keys to our new servant and cease worrying about anything, let us give the kind old master a parting cheer. He's sick. He has over-worked himself, doing his best for us; and, after all, those lectures of his were great. They had the most sublime of all virtues—sincerity.

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## The Harding Administration and Pacific Problems

**B**ETWEEN the lines of Far Eastern newspaper comment lurks the belief that Pacific problems will make or break the Harding administration. It is natural, to be sure, that the oriental press, foreign and native, should view the prospect through yellow

## President-elect Harding's Message to the Far East



President-elect  
Warren G. Harding, of Ohio

Immediately after his nomination to be the next President of the United States, President-elect Warren G. Harding sent the following message to the Editor of THE FAR EASTERN REVIEW:—

"UNITED STATES SENATE,  
"Washington, D.C.  
"June 17, 1920

"Mr. Patrick Gallagher, Editor,  
"FAR EASTERN REVIEW,  
"Shanghai, China

"MY DEAR MR. GALLAGHER,

"I want to very gratefully acknowledge your cabled message of congratulations.

"It is very interesting to know that one is being thought about and courteously considered so far away from home.

"I hope America shall ever be able to maintain the high regard which was developed for this Republic during the era of William McKinley.

"Very sincerely,

*W. G. Harding*



Vice-President-elect  
Calvin C. Coolidge, of Massachusetts

the old swimming hole was too much for their patience. The fish were beginning to bite in the stream, a lot of things became more interesting than the fourteen or the four points and the dogmatic declamations of the Schoolmaster. The master's command to move from the familiar "little red schoolhouse" into the hurriedly-built and queer-smelling Covenant College and there to take a p.g. course in internationalism (as opposed to old-fashioned Americanism) was too much for the girls and the boys. On their own account, they broke up school, and soon they will be celebrating their final commencement.

Next March, a servant will succeed the master in the White House. Senator Warren G. Harding is the servant of the American Commonwealth—an honest, capable, earnest, faithful servant. He is of the patient, McKinley type—strong but eminently reasonable and unusually wise. With Mr. Harding guarding our "family plate," seeing to it that strange foreign moths do not consume those well-known words of General Washington about "entangling alliances" or Mr. Monroe's remarks about the Europeanization of America, and at the same time courteously receiving all our friends in the good, old-fashioned American way, the girls and the boys of

spectacles; people are ever more interested in those things that concern themselves. In this case, however, what the Far East says to-day America may possibly say to-morrow: Pacific problems may make or break the Harding administration.

It would be foolish, and it might be fatal to overlook the dangerous, criminal conspiracy that is seeking to incite into war the governments and peoples of Japan and America. Several foreign and many native newspapers in China hailed Mr. Harding's victory as "a step towards war." We hope that Minister Crane's bright young men at the legation in Peking are collecting these editorials of the Asiatic war-makers. We trust that our excellent minister is sending them forward to Washington. They tell their own story, reveal the inherent rottenness of their inspiration. For the most part, they are pitiful and mean, and they breathe not a particle of love for that American nation which, however blunderingly at times, has at least always sought to keep the faith with China. Has China so lost "face" with herself that she can exult, without shame, in the miserable whines of conscious cowards? We hope not. We prefer to think not.

It will be well for Mr. Harding to start out with a very serious



view of the Pacific situation. That can do no harm, and it may do much good. It will not be incompatible with a strong, sober and sensible attitude towards all purely American questions. The Pacific problem may be *the* American question. It has many sharp angles, from California to Cochin-China. The mere fact that it is being utilized for the purpose of plunging us headlong into war is reason enough why our President-elect should calmly and carefully consider it and mobilize for its solution the trained American minds at his command.

One reason why the best American intelligence in the Far East rejoices over the Republican landslide is because the political and diplomatic brains of the nation will be available to the new President. Grim experience and no partisan leaning compels the conclusion that the Democrats proved themselves to be asses in lions' skins. The bray of Josephus could ever be depended upon to drown even the voice of the Prophet. Apart altogether from party commitments and pledges, Mr. Harding's fine character and record assure us a representative cabinet to conduct the business of the nation; and that is all that the situation requires.

We are far afield from Washington. We are not in the confidence of the President-elect. We do not know whom he will choose to head any of his departments or to fill any of the Far Eastern billets. Much will depend upon his secretary of state. All the available men are good men. Precedents are against the selection of either Mr. Taft or Mr. Root; Mr. Taft because of his former tenure of the Presidency and Mr. Root because of his advanced age. The older generation of Americans will possibly recall how, in April, 1898, on the very eve of the war with Spain, Judge Day had to be hurriedly hauled off the bench to take over the state portfolio because of the collapse of old John Sherman. There is ground for the belief that Mr. Root will be held in reserve for the elaborated Hague Court which may eventuate from Mr. Harding's plans for a practical friendly association of civilized nations. The precedent against Mr. Taft is not very serious; but again, there is a likelihood that Mr. Harding will specially honor that very distinguished jurist of the defeated party, Chief Justice White, in the organization of the international court of last resort, and that would most likely help Mr. Taft to achieve his life-long ambition, the chief justiceship. From the Far Eastern viewpoint, Mr. Taft would be the man for the state department. He knows. His very prestige would be assurance of success. The preservation of peace is worth the smashing of a dozen precedents. It might be Taft. His Buckeye birth is not a bar, no more than it need be a bar to Mr. Myron T. Herrick. By all means, if possible, Mr. Harding, let us have Taft! His Pacific experience, his ability, his personal knowledge of Oriental men and things single him out as the best choice from among many excellent, available men.

Mr. Lodge and Mr. Knox are good men. Dr. David Jayne Hill is a very good man. The choice might fall upon Hiram Johnson—a remarkably able man. It might be Hughes. At all events, it will not be a Bryan, a Lansing or a Colby. The probability is that it will lie between Taft, Lodge, Knox or Hill, if age or the court of international justice prevent Root's return to the state department. It might possibly be Mr. James M. Beck, although the author of *The Evidence in the Case* is more likely to become our ambassador at London or Paris.

There is Far Eastern comfort in the message of President-elect Harding to THE FAR EASTERN REVIEW. What the Pacific needs is a new McKinley era—strength, sagacity, sanity, stability.

Mr. Harding is, in the best sense, a big man. Unless we are greatly mistaken, it will be his good fortune to rescue us from the mess which eight years of Wilsonism left in the Pacific political basin. If he succeeds in restoring our "East and West" ocean to its rightful name, four years hence, his party will be able to go to the electorate and say with a broad grin: "He kept us out of war." History will have to record the Pacific war clouds of 1920, created, beyond any question of doubt, by the blundering amateurs in statesmanship who played the devil with American-Asiatic relations under the ægis of Democracy. Re-elected on the "Kept us out of war" slogan, they dragged us immediately into a war, "stern-foremost;" bungled the war-making, muddled the peace-making and then left President-elect Harding with a new war knocking at our Pacific door. A friendly and peaceful adjustment of the Pacific problem is the nation's first need. If Harding attains it, he will provide his

party and his people with an irresistible contrast that may not be lost upon the voters of 1924.

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## California and the Japanese

CALIFORNIA'S vote to exclude the Japanese from colonization under any pretext was a foregone conclusion. The manner in which this racial question has been muddled is to be regretted. The Bear State's decision need not necessarily be regrettable, because, under all the circumstances, it was natural; and it may lead to a just and friendly adjustment of the biggest question in all the world.

We prefer to think that the vast majority of Californians and of Japanese are more interested in serving their own interests than in merely "talking big" or falling into anti-Californian and anti-Japanese man-traps. California won't stand for Asiatic colonization. It is quite conceivable that if the Japanese don't get out while the going is good and easy, a very formidable situation might arise for both Japan and America. Japanese will do well to remember that the American Union was cemented by bloodshed, because of foolish attempts to settle a race question in the courts. The Dred Scott case put the fat in the fire. We don't want a repetition of grim American history, with or without foreign complications. We do want to be just to the Japanese, for our own honor as well as for the sake of the great Japanese nation.

The California question has been bungled from first to last. The Japanese have not been helped by pussyfooting proposals that burked the real issue. Always, the fact has been that the Pacific Slope objects to the Asiatic immigrant. Under similar circumstances, were the positions of the nations reversed, the Japanese would object as strenuously and as effectively. This is not a question that can be settled by professorial theorems or blatant appeals to mob passion, inspired by Bolshevik and other enemies. It is a matter for men—for Japanese men and American men. It is a matter of flesh-and-blood fact.

It will be well if both Japan and America mark time until the Harding administration takes hold at Washington. The illness of President Wilson and the incompetence of Secretary Colby are merely two of several unfortunate circumstances. Ambassador Morris and Baron Shidehara might arrive at a sensible settlement, but we strongly doubt the willingness or ability of others who have the Far Eastern business of the state department under their fingers and thumbs. We state it as a matter of positive, personal knowledge that there are men in positions of trust under our government who do not desire to give Japan a square deal; and there can be no amicable settlement of this exceedingly difficult question unless there is back of America's hand a determination to be on the level with Japan.

It is suggested both in Washington and in Tokyo that the matter could be settled either by treaty or in the courts. Mr. Ichihiro Tokutomi, the able and brilliant editor of the *Kokumin Shimbun*, seems to see hope in the new treaty. This issue cannot be removed either by treaty or through judicial decision. We are dealing with elemental truths, not mere points of law.

The Japanese race question will be settled amicably if California, in her own interest, demands of the American government that our Asiatic policy be based upon "America first." California is vitally interested in pressing for a Californian solution rather than for a foreign solution. San Francisco and Los Angeles, and California as a whole, have a dominant interest in Asiatic trade. Much of the prosperity of the port of San Francisco arises from its trade with Japan and China. Anti-Japanese agitation is not helping San Francisco to make money out of Japan. Other wide-awake ports to the north of San Francisco are hotfoot after Japanese trade. Their alert agents are on the job in Japan. Are the sage San Franciscans so blind to their own interest that they seek first prize as the world's silliest of suckers? We rather think not. There are wise men at the Golden Gate who can help to save the day for themselves and all America. Portland and Seattle are showing them the way.

While San Francisco is playing with gunpowder, "Jap-Slapping" at the instigation of Bolsheviks and conscientious cowards in China, the Port of Portland has a hustling representative established at Kobe and the Seattle Chamber of Commerce has Mr. S. T. Toby breezing his way into Japanese business



circles, cementing good relations between Seattle and Japan. San Francisco is arming them with powerful arguments. People prefer to do business with their friends.

To win all, San Francisco and California need only be strong and sensible. The strength should be exerted upon Washington. The sense should be applied to the race question, itself—the biggest question in all the world, to-day. It is up to Washington to say to Japan, quite informally as it were: "You will help yourself by getting your people out of California, where they are not wanted." To say that would necessitate knowledge on the part of the government of Japan that it is dealing with a friend and not with an intriguing enemy. The Japanese are proud. Their honor is involved. Our honor is involved. We owe it to ourselves to tackle this job with clean hands and in a sensible American spirit. That requires some knowledge and a certain amount of decency. If Mr. Wilson adds this problem to his other Far Eastern failures, there is always hope in Harding and his to-be-chosen secretary of state.

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## The High Cost of Repudiation

EVERY now and then, questions crop up in China that call for but do not usually receive impartial comment. Partisanship is playing the very devil with the larger part of the Far Eastern press. For example: According to the semi-official Japanese press, the Peking government has practically repudiated the series of so-called "industrial loans" advanced to the Tuan régime in 1918 by a group of independent Japanese banks closely allied with their government in the development of Formosa, Korea and China. These much-criticised loans, aggregating Y.160,000,000, were apparently paid over to the Peking government without awaiting the usual formality of drawing up a final agreement covering interest, security, payments, and other details. A large part of these advances was undoubtedly employed by Tuan and the Northern tuchunate in carrying on the campaign against the Southern, or so-called Parliamentary party; and thus contributed towards the creation of the anti-Japanese sentiment that has been prevalent in China. In taking over the reins of government from the Terauchi cabinet (which urged the banks to advance these loans on national grounds) the Hara ministry has tried to have the preliminary agreements accepted as final contracts. Mr. Iwase, a director of the Industrial Bank of Japan, was sent to Peking as the representative of the Group to negotiate with the Peking government. The chronic insolvency of the old and new Peking régimes, and a marked unwillingness to discuss these matters, finally led to the temporary abandonment of the mission and Mr. Iwase returned to Japan without arranging a definite settlement. The Hara ministry is still doing its best to find a satisfactory basis of adjustment, but with little success. As a consequence of this peculiar situation, the directors of the three important Japanese banks are greatly perplexed as to how these loans will be repaid.

It is assumed, of course, that the Y.40,000,000 advanced by the syndicate for the four railways in Manchuria and the two Shantung lines, which are to be included in the Consortium pool, will be repaid out of future Consortium advances to China. The bulk of the Y.20,000,000 Manchurian advance will undoubtedly have to be charged against the most important line [the Taonan-Jehol railway] which the other powers in the Consortium requested Japan to place in the pool. Under these circumstances, it would appear that the Consortium will have to assume the obligation, in part, to recoup the syndicate for this loan, as well as the advances made on the Shantung lines pooled in the new combination. The other "industrial" loans may take some time to straighten out on a purely business basis, owing to the opposition of the anti-Japanese element in China.

It is unfortunate that this question should crop up just when the Consortium meetings in New York have terminated in a general working agreement to finance China. China's practical repudiation of these Japanese obligations may have a most far-reaching effect on her credit, and on the working of the Consortium itself. The three Japanese banks (The Bank of Taiwan, Bank of Chosen and the Industrial Bank of Japan) are among the strongest institutions in Japan and are members of the Japanese Group in the new Consortium. If their previous loans to China, made in good faith, remain unpaid as to interest and principal, they cannot be

expected to demonstrate any great enthusiasm for new risks in that country.

The situation is one that compels thought. Here is a case where an independent group of bankers was urged by its government to lend financial assistance to China. These banks are all semi-official institutions, and when the government expressed its desires, it was not incumbent upon the bankers to inquire too closely as to how the money was to be expended. As in the United States and other countries, the first obligation of the bankers was to their own government. It is not so much a question between China and the bankers as it is one between the banks and their own government; and, in the final analysis, one between the governments of China and Japan. As the Tuan régime was recognized by the powers as the *de facto* government of China, it would seem that the new government must in time accept the obligations of the former régime as binding upon the nation. It may be urged that the anti-Tuan factions condemned these loans and notified the world that they would be repudiated, but this cannot constitute a solid basis for such action without destroying the legality of other transactions. The Reorganization Loan to the Yuan government in 1913 was negotiated by the Five Powers over the loud and emphatic protest of the Parliamentary or Southern party, and the money was employed to extinguish the feeble flame of self-government and to consolidate a strong centralized camarilla at Peking. Therefore, the argument of justifiable repudiation cannot well be extended to the Japanese advances to Tuan without seriously complicating the entire loan situation in China, and creating precedents for any insurgent *tuchun* or political party to protest against future loans to Peking.

There is still another and more important phase of this problem, which apparently has been completely overlooked and ignored by critics of Japan. We may admit at once that, when considered from the viewpoint of the Southern Chinese and those Powers opposed to the extension of Japanese influence on the mainland, these loans were most unwise. We believe, however, that Americans have no legitimate right or excuse to attack the policy of the Japanese government in authorizing these advances to China. Neither the anti-Tuan, Chinese factions nor the Powers have the right to question the good faith of the Terauchi Ministry in applying a policy calculated to protect the higher interests of both nations. Japan's position is, has been, and will be, largely dependent upon China's ability to defend herself against an attack from the direction of Urga. Japan has had to fight one war to preserve her independence against this menace, and, in exerting every effort towards placing her neighbor in a stronger position to guarantee the security of both nations, she is properly within her rights. This was the basic reason for the establishment of the War Participation Bureau and the creation of the Frontier Defense Army. Anti-Japanese Chinese and their foreign friends may prefer to labor under the delusion that these tactics of Japan were directed against popular government and intended to consolidate the power of the military oligarchy in Peking. From their viewpoint, there is considerable justification for this idea, but on the other hand, there were greater and more pressing reasons why it was essential that the Peking party should be placed in a position to defend the country against the danger from the northern borders. Silence seems a virtue stretched to the nth degree by the Japanese government in its attitude towards its critics. There are excellent reasons for adhering to this policy. Yet, Japan can reasonably urge the identical reasons that have influenced other powers to pursue identical policies when their own interests demanded such action. Japan's first concern was her own protection, and this could only be guaranteed by the Peking government, holding the full recognition of the powers. The fact that a civil war was in progress in China was incidental to the main issue. Japan was not concerned in the outcome of the internal struggle in China. She did not invite it or create it. China was split asunder by the activities of the celebrated "Flying Wedge" which "coaxed" the Peking government into severing relations with Germany under the threat of civil war, and against the advice of Japan, Great Britain and France. America must stand full responsibility for dragging decrepit old China into the world conflict; and, China once in the war, we should have supported the government that accepted our invitation. The Chinese "party of Democracy" soon became the anti-Allied party, and launched the civil war because of opposition to entering the greater war under the leadership of Peking. In the last analysis, the southern rebels were outside the pale of Allied



sympathy and assistance during the progress of the war, and the northern, or military party was fully entitled to any practical aid and sympathy that could be extended to it by the Allied governments. Unfortunately, the Allies could not assist China financially. This task, therefore, devolved upon Japan, and the latter followed Great Britain's lead in the case of Belgium and all the other Allies. As the campaign in Europe developed, conditions began to change, and Japan had to face the same menace to her existence that confronted Britain through the invasion of Belgium. The sudden rise of Bolshevism and the possibility of its spread to the Far East compelled Japan to take advantage of every opening in China to justify loans that would strengthen the northern military party.

The world was in the middle of a great war. All nations were guided and inspired by their militant elements. Huge loans were freely extended by America and Britain to their smaller Allies to help prosecute the war to a successful finish. Peaceful nations were urged to throw off their neutrality and enter the conflict on the side of the Allies. Loan conditions were written into agreements. If it was perfectly legitimate for Great Britain to finance Belgium and her other allies in order to safeguard her own security, and if the United States was justified in advancing over \$10,000,000,000 to her Allies for the same purpose, can Japan be censured for advancing \$100,000,000 to enable China to place herself in a position to defend their mutual territories against the menace from the North?

The most extreme strictures on Japan's policy have proceeded from American writers, yet the fact remains, that it was America who dragged an unwilling China into the war and so created the internal upheaval that kept the country in turmoil during the subsequent period.

When Japan entered the war, responding to the first bugle call "To Arms," she made no pretense to lofty motives of holier-than-thou altruism. She joined the Allies, instantly, not to make the world safe for autocracy or democracy, but to make Asia safe for Japan. She acted as England acted, as France acted, as Belgium acted, as Romanof Russia acted, as Italy acted—in her own national self-interest and to discount the Far Eastern future in her own favor. She acted as we acted when, reluctantly and in justifiable anger against a vicious attempt to embroil us in Mexico with Japan, we entered the war and did our part to end it. She lived up to the terms of her alliance with England and responded at once and very effectively to England's call for aid. The facts are matters of history, but Japan's traducers care little or nothing for facts and it must be confessed that historical consistency is not one of their strong points. In pursuit of a perfectly legitimate policy, to organize and maintain an adequate frontier defense force for Mongolia and the Siberian border, Japan advanced substantial sums to the internationally-recognized government of China. That the loan transactions were not above criticism is as certain as the fact that some of the proceeds became diverted to the unsavory pursuits of Chinese despots. These things are regrettable—as painful and pathetic as the politics played by England and France (and their war-time enemies) in the Near and Middle East. If there is to be an inquest into war-time loans, what nation—not excepting our own—can hope to escape embarrassment and condemnation? We all had to help our friends in the manner most convenient to our own objects; we did what we could to preserve principle and at least an appearance of decency; but none of us proved immaculate or infallible. Following the wise maxim of Abraham Lincoln, "we did the best that we could with the instruments at hand." By loans, as well as by other means, we ripped the rafters out of the political structure of the greater part of Europe and the house that we built to replace it proved a flimsy house of cards. It was swept away, "for the winds blew and the waves came."

It was very unfortunate that some of the Japanese loans were used by Chinese for purposes of Chinese disruption. That was rather a Chinese than a Japanese concern, although Japanese would have been well advised to have made it a Japanese concern. Under the international circumstances then regnant in China, was that possible? Did we do our part to make it possible? We fear that the honest historian will be compelled to answer, "No." Apart from such considerations, the government of Japan had a paramount duty—to protect Japan. The Terauchi administration fulfilled that duty.

Let there be no mistake. We are not attempting the truly impossible task of justifying the moralities of the Nishihara loan

transactions. They were in many respect as evil in certain of their conceptions as rival loan propositions that, during the same evil period, received the okeh of busy Dr. Tenney. The Chinese were made to pay the pipers, thanks to the weakness and venality of Peking mandarins. Approbation is one thing. Repudiation is quite another thing. Is there not enough honesty or intelligence, or decency in China to furnish a safe middle-ground in unbossed opinion?

If we have mentioned Great Britain's loans to her needy Allies it is in no spirit of criticism: far from it. The principle is old and well understood. It was applied in Asia by Gabinus when Marc Antony was a colonel of cavalry in Syria. It was applied by Sir George Lyttleton and the Duke of Newcastle and by Pitt, who criticized but would not repudiate the loans to Frederick the Great. And, merely in the matter of China, the less said about some loan transactions the better.

But, we are told, the Nishihara loans were "subversive of Far Eastern democracy and the higher purposes of self-determination." *Moryah!* Confronted, as we are, with the hard facts of Chinese chicanery and the wilful and pitiful Chinese political antagonism to anything along the line of practical self-government, is it not high time that we should deal with all these matters on their merits? Who resisted to the last the attack on Anfu, author of the loans? Dr. Sun Yat-sen and his associates of the Canton government now once more, Phoenix-like, arising from its own ashes! Yes, Dr. Sun pinned his faith on Tuan, and it was Tuan's government that sought and obtained the Japanese loans.

In Japan, as elsewhere, there are many powerful people who plead for self-determination and all the rest of the fourteen and four points in China. Nowhere else was the Terauchi loan policy so unsparingly raked and riddled as in Japan. Figg or Broughton, or Godkin at their worst never assailed ministers as did the Japanese opponents of the marshal-premier. Nevertheless, Terauchi could say that Japanese interests of self-protection had a prior claim over Chinese demagoguery, particularly in view of the pro-enemy paint that was splashed over the Chinese protests. Japan was busily engaged making the world safe for Japan. Chinese interests were not helped by the slogan of the new crusade, "to make the world safe for democracy." Many good Americans, personal friends of the President, regarded that as an impertinence. It stuck in the throat of many of our European friends and it could not be expected to bring down the house in Japan.

Present or future governments of sorts in Peking or in Canton or elsewhere in the broad Chinese domain may question these loans and they may find a certain amount of support among the more superficial friends of China in Europe as well as in the United States. Chinese governments may repudiate the loans and refuse to foot the bills, when presented. Should such policy of repudiation secure the support of America, Great Britain and France, then these powers will have established a precedent that will come back to bite them at some future time.

The new Consortium being the instrument of the friendly powers for the financing of China, and Japan being a member of the Consortium, the questions involved in these loans should receive very careful consideration. Is the paramount interest of Chinese-Japanese mutual defense excluded from or opposed to the purposes of the Consortium? Has our government committed us in advance to joint responsibility with England and France for the future protection of the far-flung Asiatic frontier line? Does the new agreement contemplate the possibility of armed intervention in China? Repudiation of these loans, if sustained by Washington, Paris and London, might and doubtless would raise these questions. In that case, remembering November, the American answer would be certain and emphatic.

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## "Whose Ox is Gored?"

WHEN post-war deflation caused a serious financial situation in Japan, it could not be said that the spirit of christian charity breathed through the comments of the Far Eastern foreign press. As Nero fiddled over burning Rome, so the majority of our christian confrères danced and sang with joy because misfortune had overtaken poor pagan speculators. It was an unedifying manifestation of vicious selfishness, as shortsighted it was



mean and pitiful. The last possible shekel was squeezed from Japanese traders up against the hard wall of adversity.

A few months have passed, the Japanese have taken their medicine with cheerful dignity, and now the shoe of misfortune is on the other foot. In one Shanghai court, alone, suits for more than a million are reported to be in process of commencement, as a prelude to the coming settlement time. Rumor is rife with several concerns that were vaunting their imports while egging on the Japanese boycott. The godowns are bursting with unsold goods; with the majority of firms business is at a standstill. The situation is truly critical and we have no desire to add to its horrors. The reflection, however, will obtrude that "curses, like chickens," do "come home to roost;" and that, in business, as in most things, much depends upon whose ox is gored. We would give all we ever hope to possess if only we could know the secret thoughts of certain bland gentlemen who sit sipping their tea with scarcely a murmur, hugging their hands over silken-robed paunches, "sawing wood." Can you blame them? Not much. They are merely taking a leaf out of the book of their christian preceptors who taught them how to fiddle over the financial fires of the other fellow. True, they may pay for their own music. What of it? From their viewpoint, all life is a gamble; and speculation is the very spice of their business life.

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## Watch Out, Mr. Shanghai Rent-Hog!

THE Foundation Company of New York is the latest big American concern to enter the China field. In addition to factory erection, etc., they are credited with participation in a big plan to provide Shanghai with model American dwellings. That will be welcome news to many heads of foreign families in Shanghai, hard hit house-hunting and thankful for any sort of roof-tree that they can call home. Competition has its uses.

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## The Land of Slamming Doors

**B**ANG! BOOM! BANG! come the noises wafted from afar. What can they be? The Japanese naval manœuvres? Nothing of the kind! Simply, the reverberation of Doors being slammed-to, beyond the Yellow Sea, as one festive *tuchun* after another puts up the bars to the province under his control. The musical, metallic notes that follow the loud reports come from the merry tinkling and clinking of the shining little gold pieces as they fall into the capacious strong-boxes of the waddling, laughing *tuchuns*. It is a great pastime, the sport of kings! They are an energetic lot of sports in Far Cathay.

A gentle, unassuming Briton ambles unconcernedly into Peking, hobnobs condescendingly with a *tuchun* or two, and, BIFF!, slam goes a door. It is nothing. Only the overlooked highway leading to future aeroplane business being nailed up for a generation. While others are fussing and trying to fly over the fence, BANG! BOOM! reverberate the echoes from away up the Yangtze. When the sound dies away, we behold the mining door to Hunan closed and barred; and another very suave, unostentatious, close-mouthed gentleman from Albion coolly disappearing down the big river with the "monopoly" in his pocket. POP! POP! POP! is heard from the same direction; and, as we rub our eyes, we can see a sportive American, very keen on co-operation with the Chinese, gleefully slamming-to a little overlooked side-door, in the same district. While we are cogitating on the ethics of it all, and wondering for what the Consortium was formed--BANG! BOOM! WHIZZ! WHAFFETY!--comes an earthquake. We are getting rather used to it all, by this time, however. Now, it is only the ponderous, rusty old portal of Kwangtung banged-to; and we again discern another unobtrusive, reticent and scrupulously-correct scion of British aristocracy "bringing home the bacon" with a provincial coal-mining monopoly covering the short and insignificant period of ninety-nine years.

Dear Old Cathay is a wonderful, mysterious country, with its yaméns and temples; its countless cities, with their moats and walls and pagodas and hoary old monuments, side-by-side with

up-to-date innovations. High above these emblems of departed glories rises the picture of the rollicking, frolicking, much-married, blue-uniformed, twaddling old *tuchuns*, engaged in their favorite outdoor recreation. Above the perfumes and gentle odors, the tinkling of temple bells, to our ears are wafted the echoes of mirth, of side-splitting glee, and the comforting clinking of yellow metal.

When "the dawn comes up like thunder outer China 'crost the Bay"

Creep echoes of the laughter of the Tuchun's holiday;  
And the howls and groans of China that presage her woful fate:

Then booms the detonation of the slamming of the Gate,  
The banging of the Gate,  
The closing of the Gate--

The glee and the commotion and the tinkling of the Tael,  
The singing and the yelling drown the cruel Famine's wail:  
Through the dying coolie's *huala* and the mulcted merchant's roars

Comes the screeching of the hinges from The Land of Slamming Doors.

## Dr. Sun Goes South

Dr. Sun Yat-sen, Dr. Wu Ting-fang, Mr. Tang Shao-yi and other leaders of the Cantonese party left for the Kwangtung capital, November 25, to head a reconstructed Southern Chinese government. Dr. Sun talked with a representative of THE FAR EASTERN REVIEW immediately before leaving Shanghai.

"We want peace," he said. "Above all, we desire a representative, orderly government. We hope to attain these objects at Canton. Our delegates here are ready to negotiate a real peace if Peking says the word, but we cannot recognize a spurious manifesto of unification."

The father of Chinese republicanism is in good health and spirits.



Dr. Sun Yat-sen, first Chinese President and head of the Cantonese movement



# ASSIMILATIVE CHINA

By Paul Myron

**C**HINESE assimilation of western methods to-day presents newer and sharper angles. This field of inquiry is still comparatively virginal. We shall commence the consideration of Chinese assimilation under two inquiries: first—How far will the political, social and economic life of the Occident be assimilated by the Chinese? and second—How far will the Occident assimilate anything of the ancient civilization of the Chinese?

There is a great variety of expression against any chance of the Chinese assimilating much of our occidental life. We find expressions, from the very seat of great occidental authority, that the Chinese are so alien in race and so incongruous in national traditions that they are utterly incapable of assimilation to the occidental body politic.

According to this widely accepted viewpoint, the Chinese will continue to remain foreign to our own type of civilization, and forever strangers to the purposes and aims of our political life; and, therefore, unfitted to share in any measure with the occidental development of the world. Moreover, the Chinese from this angle of reflection are so entirely out of sympathy with everything pertaining to christian civilization that there exists no hope that they may ever become a part of that western type of life that is now holding sway over the whole world, outside China. A large body of anti-Chinese legislation has grown up under these theories of the unassimilative character of the Chinese.

The Occident has thrown itself into a great rage because the Chinese will not accept Christian civilization. Tens of thousands of missionaries with the treasure of a great philanthropy behind them during three generations have made but a most pitiable showing in their efforts to persuade the Chinese into our easy methods of occidental civilization. Efforts among the Chinese all along the line of western propaganda, to make them change their type of social existence, have failed dismally. To-day, the Chinese are much held in the ancient caste of their hoary pattern of life as ever before.

Under this theory of the absolute unassimilative character of the Chinese, the Occident calls the Chinese half-civilized and even at times barbaric. Western life declares that the Chinese can only succeed by becoming such as is the Occident; but for reasons best known to himself alone, Chinese John does not want to be like the Ocean man from the West.

The Occident, at times, declares with vehemence that the preservation of occidental society demands that the Chinese accept

our western type of life. "As long as one-fourth of the population of the whole world continues to live on in the future as it has in the past there is in such insolation a danger to the West. Chinese racial obduracy stands as a menace to the peace of the whole world," declare these alarmists.

The field of argument opened up by such theories is as boundless as the thought and prejudices of men can make it. China is as yet too newly discovered by the West to allow a satisfactory

common meeting ground of understanding for the discussion of the matters involved. China has lived for some forty centuries without any help or assistance from the Occident and she considers that she can still live on, regardless of what the Ocean Men may desire.

Let us attempt in a crude, rough way to discuss what may or may not be accepted by China from the Occident.

May we not boldly declare that China is bound by the very instinct of her humanity to commence an assimilation of Western life through assimilation of occidental industrial methods?

Already, we observe factories going up all over China and built in great part by Chinese capital. The cotton and silk industries are changing from the ancient waste methods to the modern efficiency machine system. Is not therefore the first great step forward which China is to take, to be found in her changing from a land of hand-labor to a land of machine-labor?

"We have great trouble in standardizing the raw silk which we buy from China," declares the American silk importer. "From our modern viewpoint hand-labor is very inefficient to produce the product that our demands exact. Now, however (seeing the greater profits that are to be made from machine work), the Chinese are importing expensive modern machines from America for their silk industry, with the result that we shall soon have the Chinese product that our western needs require."

Yes, we may safely, if not sagely, assume that China's new life is to commence in the factories. Factories mean less

waste, a more finished product; and, above all, factories mean a comparatively steadier employment and a much higher wage. Equalize the ridiculously cheap Chinese wage, even ten per cent., with the wage of Chinese transpacific neighbors, and China is already on the road to a great reform.

Will not this industrial reform of necessity precede the social reform? Will the one not effect the other? Factories mean a large investment of capital. Capital demands protection, not only from a centralized government, but from an honest judiciary,



林百克

PAUL MYRON

A Practical Sinologue Who is Educating His Boys Under Chinese Methods



efficiently established. Hence, the step from industrial to social life and all its political expressions.

We may, therefore, safely assume that the Chinese are not utterly alien to us, in that they have the human attribute of acquisitiveness and will take advantage of occidental methods in order to increase their fortunes. And, in passing, we may note that a great world-affecting complication will some day arise in this regard, for the competitive cheapness of Chinese labor in the factory will prove in the minds of great authorities a menace to the industrial safety of other nations. At the present writing, Japan (in spite of the boycott) buys and sells more in China than America and Great Britain combined. China is a competitor of the world almost entirely in what may be termed raw, or only partially manufactured products—for China, with her hand labor (except in curio making), cannot compete with occidental machines. Before the transition of the Chinese from their ancient to their modern life has taken but a short step forward, may not the Occident regret that she has forced China to take on the way of the modern world? When the war-wasted countries of Europe re-establish themselves and world competition becomes keener, then the Occident will find China using those very raw materials in her own manufactures that Europe, America, and Japan so much need.

Hence, there will be more or less political-bally backing on the part of all the countries involved in this industrial development of China which must precede her development. The world's readjustment after the great war is but a tiny eddy compared with the great industrial maelstrom that will be created when China commences to know the great bounty of machine labor.

The more we go out into this field of conjecture the less certain we are of what even the day will bring forth. Present-day conditions in China may prove to be merely straws in a cross wind which will not show really how the main current of the wind is blowing.

But may we not at least assume that the Chinese are now assimilating and will continue to assimilate all our occidental methods as far as money-making is concerned? This does not mean that the native banker is using the adding machine instead of the abacus; but it does mean that every day more native bankers all over China are following the speculations of exchange on schedules fixed by the foreign banking institution, upon which they have already learned to rely.

But how can we assume that an industrial change is necessary before a political and social change can be effected? "Japan made her change without any industrial transition," answers someone.

This opens up another unlimited field of argument which can hardly be touched upon in this article. No comparison whatsoever can be made between China and Japan or between China and any other country. We may briefly dismiss this contention by saying that China is China. This vacuous phrase may not mean much, but it has at all events the merit of being conclusive. It is true that Japan did not undergo the long industrial transition that China must needs undergo in order to enter into the family of nations on an equal footing with the other nations of the earth. But it is likewise true that Japan did have a highly organized militaristic oligarchic system of the control of its masses that China has never accepted.

But why is it necessary that China should change from a hand-labor country to a machine-labor country in order to evolve the drastic changes needed in her social life and to fuse and articulate the strength of her political life?

Because all the world is now on a standard of machine efficiency. The Chinese masses are poor beyond any conception of occidentals, save those who have lived among the Chinese; they are poor because they cannot with their hands produce enough to obtain comfort. China is in many ways still as virginal as America was when discovered by Columbus. Its mineral wealth is almost untouched and undespoiled. There are vast tracts of rich farming lands which are mere deserts, when by the machinery of reclamation they will be made to add to the abundance of China, and of the whole world.

Dense masses struggling for their maintenance will not bother about politics. The most violent demagogue cannot arouse China's swarms from their lethargic ignorance, wherein their struggle for existence is purely physical.

Nearly everywhere else, except in China, the struggle for ex-

istence is rather a brain struggle than a body struggle. It is a mental rather than a physical effort that made the prosperity of the world before the great war and which is now repairing the wastage of the war.

China, at present, is almost entirely out of this game of the higher struggle for existence, for her masses know nothing of that machine assistance dominated by intellect, rather than by physical force.

Politics has no magic by which it can pour from the cornucopia of its potential abundance even a modicum of comfort into the squalid dirt floor hovels that are exhibited everywhere in China. But natural forces, rather than magical, are already at work and the change is actually in progress.

## The Japanese Press on Mr. Harding's Sweeping Victory

OPINIONS of the leading newspapers on Senator Harding as the next president of the United States naturally centre around his attitude towards the League of Nations and the Far East. They speak at variance though with conviction in regard to his Far Eastern policy, but as to the probable course the United States may take towards the League of Nations, they are more or less baffled. It is difficult to say what Senator Harding will do with the League of Nations, says the *Tokyo Nichi-Nichi*, but his election, which signifies the victory of imperialism, will bring a great change in the foreign and domestic policy of the United States. There is no material difference between Senator Harding and Governor Cox in respect to the Japanese problem in California, but the election of Senator Harding makes it very difficult for the United States, though not hopelessly so, to join the League of Nations.

The next administration will see to it, declares the *Hochi*, that the United States is not involved in European affairs. It will make a supreme effort, however, in disseminating its influence in the Far East, and China will no doubt make the best of the occasion to her advantage in solving her problems. The election of the Republican President, therefore, says the *Hochi*, will make the Far Eastern situation more difficult for Japan than heretofore. The new Administration will also adopt a protective policy for the development of commerce and industry.

It is well to expect, avers the *Taisho Nichi-Nichi*, that the diplomacy of the United States under a Republican President will be of a far more aggressive nature than that of President Wilson. The election of Senator Harding is a warning to Japan to guard against the United States.

Judging from Senator Harding's personality, says the *Osaka Asahi*, he will leave all the foreign affairs of the United States in the hands of the Secretary of State. If that be the case, the foreign policy of the United States will depend much on the personality of the Secretary of States. Oriental problems require a specialized knowledge; and if he proves not to be a right kind of man, and does not understand the Orient, it is inevitable that the United States will suffer in consequence.

Mr. Roosevelt and Mr. Taft understood and sympathized with Japan, declares the *Kokumin*, and it is earnestly hoped that the election of Senator Harding will mark the restoration of the traditional policy of the Republican party toward Japan. The Republican party has opposed the League of Nations and denounced Japan in regard to the Shantung problem, but this was chiefly for party purposes. The *Kokumin* believes that the Japanese-American relations will be improved by the Harding Administration.

The tendency of the Republican party, says the *Tokyo Asahi*, is for the centralization of power, and its manifest policy toward immigration declared at the Chicago Convention was no more than a general principle, so that Senator Harding is in a comparatively easy position to intervene in the anti-Japanese movement. Whether he will make any effort in favor of Japan in this regard is yet to be seen.

It must be expected, avers the *Jiji*, that the Harding Administration will aim at the complete overthrow of Wilsonian policy. As to the Japanese problem in California, our contemporary believes, the negotiations will continue and a solution arrived at while the present Administration is in power.

The victory of the Republican party, says the *Yomiuri*, has cast a gloomy shadow upon the peace of the world on account of its opposition to the League of Nations. On the other hand it is well for the Treaty Powers to expect that the change of administration, the change from the Democratic to Republican party, will bring a decisive change in the foreign policy and the tariff of the United States. As to Senator Harding's speech in regard to the Japanese problem in California, some allowance should be made on the score of party politics; but nevertheless, maintains the *Yomiuri*, the assurance which he has given to the people of California will weigh heavily on the Japanese-American relations in the future.

The election of Senator Harding, declares the *Chugai Shogyo*, signifies the victory of nationalism over internationalism in the United States. It will be immensely interesting to see how far the nationalism of the United States will affect the future of the Far East. Senator Harding will convene a meeting of the Senator Committees on Foreign Affairs in order to effect a reform of the League of Nations.—*The Herald of Asia*.





New Shimbashi Station

## Japan's Railways as seen by an American Journalist

By  
Junius B. Wood

TWO features of the imperial government railways in Japan surprise the American visitor—trains are on time and they are run at a profit. Finding trains on time is an almost forgotten experience for the American. If well advanced in years he may recall a dim past when he consulted a time table to learn when a train would arrive instead of telephoning to the station the day it was due. If he has travelled he may recall a country where they are better than in America and many countries where they are worse. Its railroads are unique even in Japan.

One reason why trains can be on time in Japan is that they are not run on a schedule of terrific speed without a minute to spare. Against this is balanced the difficulty of operation over a system which is largely single track. Safety governs the maximum speed. Records covering 10 years show for every 100,000,000 passenger-miles, an average of 68 passengers killed and 9.50 injured which is not high. Another factor limiting possible speed, is the 3-ft. 6-in. gauge of the railroads, contrasting with the 4-ft. 8½-in. gauge of America, and many steep grades, tunnels, bridges and sharp curves in the mountainous country.

One train, the limited express daily in each direction between Tokyo and Shimonoseki on the southern tip of the main island, averages 30 miles an hour. The distance is 705.7 miles which is made in 25 hrs. 15 mins. with twenty-five stops, ten of them taking 67 minutes. The longest run without a stop is 55 miles and over one stretch the train speeds up to 40 miles an hour. Running a railroad without a deficit under government operation is a more complicated formula than merely running the trains in time. Director S. Nakagawa, head of the traffic division of the railroads, says this is largely due to the single ownership and the consequent absence of competition with duplication of mileage and expense. Probably other reasons also could be given and from the maze of statistics which the railways have compiled, a traffic or financial expert might extract many striking comparisons with American railroads. The last annual report published covers the year ending March 31, 1918, and as conditions did not change much in the following two years some figures and calculations culled from it may be interesting. The figures cover only the four main islands, excluding Chosen (Korea), Taiwan (Formosa) and Karafuto (Saghalien).

There are 5,206 miles of roadbed with 1,712 stations, about one for every 3 miles, 6,000 miles of main track and a total trackage of 9,313 miles. With an area of 129,247 square miles and a population in 1918 of 56,035,100, this gives a mile of main line for every

21.5 square miles, or for 9,340 persons. During the year the number of passengers carried was 4.4 times the total population, averaging a journey of 22.5 miles for each one, or 919,258 passengers for each mile of main line. The freight handled averaged 1,740 lbs. per capital and the average haul of each ton was 103.2 miles, or 838,891 tons for each mile of main line. The respective train averages were 160 passengers or 142.6 tons of freight.

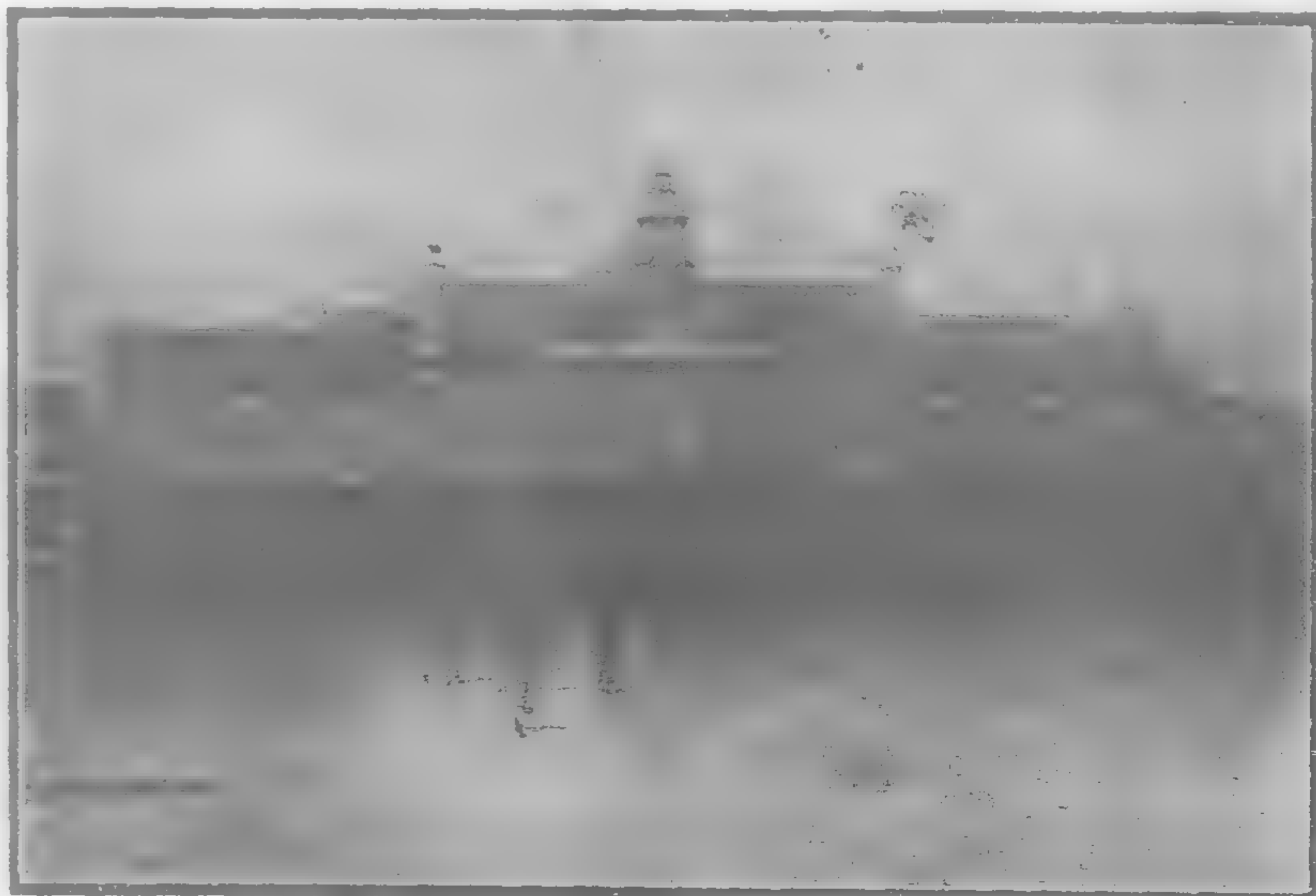
A zone system of passenger and freight rates is used, the mile rate decreasing as the distance increases. The rates which the government railway charges and still ends the year with a profit are surprising. The average passenger fare collected per mile was 1.34 sen ( $\frac{67}{100}$ ths of a cent), while the freight rate per ton on the same basis was 1.74 sen (.87 of a cent). The earnings per mile of main road were: passenger, Yen 12,665 (\$6,332.50); freight, Yen 14,947 (\$7,473.50). Any reader knows how those figures compare with the tariffs in other countries.

Japanese railroads have three classes of accommodation, with as many rates of fare for same ride. It is the same here as in any other country of the world that the lower the fare which the passenger pays, the more bundles, lunch, babies, children and dogs, he brings along for the trip. All of the lines have third class accommodations, most of them have 2nd class, while 1st class coaches and sleepers are only in the extra fare express trains. So far as cleanliness is concerned, the cars are the same, at least when the train starts, but there is a difference as to comfort and crowding. Cars of the 1st and 2nd classes are upholstered in plush while seats in the 3rd class are usually varnished. The 3rd class cars are usually overcrowded, the 2nd class are comfortably filled while the 1st class passenger frequently has a car to himself. The average traffic per 1,000 passenger-miles is: 1st class, 8 persons; 2nd class, 111, and 3rd class 881.

The 3rd class rates are taken as the basis in computing passenger fares 2nd class fares are twice, and 1st class, three times the 3rd class fares. Practically the same ratio prevails for the additional charges for riding on express trains. The ordinary three class tariffs, exclusive of the interurban trolley lines where they are higher, are:

Distance		Sen per mile		
		3rd	2nd	1st
Up to	50 miles	2.5	5.0	7.5
Above	50 miles	2.1	4.2	6.3
"	100 miles	1.7	3.4	5.1
"	200 miles	1.4	2.8	4.2
"	300 miles	1.2	2.4	3.6
"	400 miles	1.1	2.2	3.3
"	500 miles	1.0	2.0	3.0

In addition, there is a sort of *taxe de luxe*, called transit duty, in Japan proper varying from 1 to 50 sen, according to the distance and class. The additional express rates mount from 65 sen for 3rd class tickets of less than 250 miles, to Yen 7.50 for 1st class tickets of more than 500 miles on the limited express train. Children under 12 years are half fare and under 4 years ride free. Stop-overs are allowed, varying in number and length, according to the miles travelled. In addition, there are special rates for large par-



New Yokohama Station





Drawing Room of Special Saloon

ties, school children, commuters, annual tickets and other classifications deserving a reduction. According to the official report it all reduces to an average fare of 1.37 sen (67c.) a mile, indicating an unusually large proportion of half fare and 3rd class passengers for long journeys.

The freight and express package tariffs are more complicated. Freight is roughly divided into fast and slow, subdivided into carload, ton and kin (1.31 lb.) shipments, each of which are further divided by commodity classifications. In addition there are 425 special and 266 preferential tariffs. However, all rebates are made public and open to all shippers. The rates average 1.74 sen (87c.) for every ton hauled one mile.



Second Class Sleeping Car

Earnings from traffic make up 98 per cent. of the annual receipts. The comparison between annual revenue and expenses shows :

	Total	Per mile.	Train mile.
Total revenue ... ..	Y.183,525,143	Y.30,982	Y.2.63
Net working expense ... ..	84,370,026	14,243	1.21
Profit... ..	Y. 99,155,117	Y.16,739	Y.1.42
Percentage of profit ... ..	54	54	54

Though the revenue increased 82 per cent., and the expenses 54 per cent. in ten years, the average percentage of profit was 52.3 per cent. It was the same for the ten years preceding 1907, when the railroads were nationalized. The profits for 1918 were divided :

Inspection and survey expenses ... ..	Y. 124,044
Additional works ... ..	12,966,438
Interest charges ... ..	40,983,842
Subsidies to private light railways ... ..	1,500,000
Surplus ... ..	43,580,793
Total ... ..	Y.99,155,117

The roads in 1918 were capitalized at Y.1,189,913,734, or Y.198,319 (\$99,160) per mile of main line, on which the net revenue showed 8.3 per cent., a steady increase each year from 5.1 per cent. in 1908, when the roads were taken over by the government. About 75 per cent. of the capitalization covers debenture capital, drawing an average interest of 4.88 per cent. As this debenture capital is increasing at a rate of Y.70,000,000 a year, though it is a diminishing proportion of the total capital, there is a question in the minds of many whether government operation is as much of a financial success as it appears to be on its face.

Out of the Y.84,370,026 working expense, Y.32,126,172, equivalent to 2.7 per cent. on the capital, goes to 125,888 officials and employes. Their average pay is Y.225.20 (\$127.60) a year, 66 per cent. of them receiving less than Y.200 a year. Despite the low pay, they are willing workers. In addition to the pay there are bonuses, pensions, commissary stores, hospitals and schools, in which they can participate while several thousands are furnished with uniforms or residences by the railroad.

The railroad employes are classified in the same hierarchy of rank which prevails through all of Japan's civil service. The



First Class Dining Car



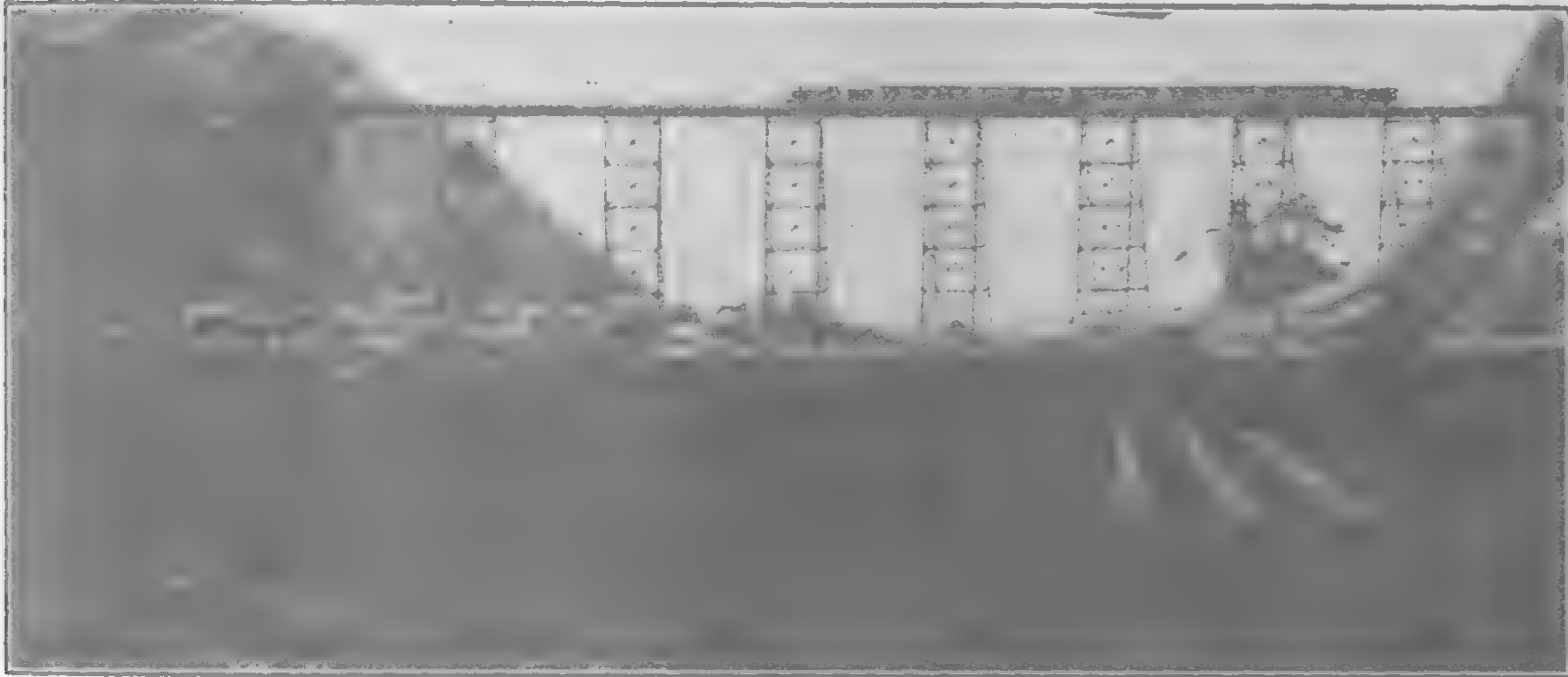
First Class Passenger Compartment



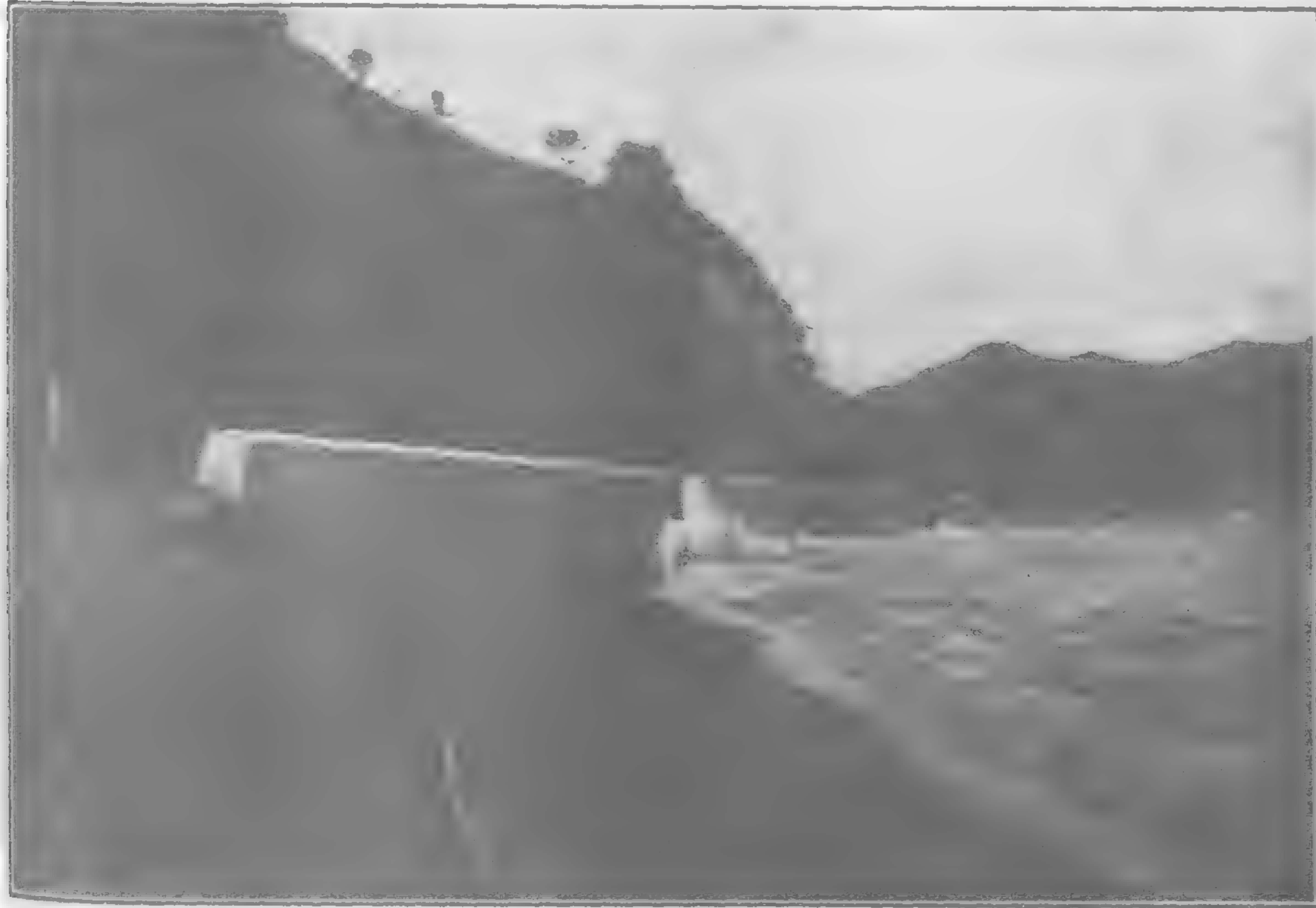
THE UP-TO-DATE RAILWAYS OF BEAUTIFUL JAPAN



Arakawa Bridge, Shibata Line



Viaduct at Amarube



Shore Protection, on the Sacki Line, Kyushu

president who is directly appointed and responsible to the Emperor is of shin-nin rank. The vice-president, directors and half a dozen other officials, indirectly appointed, are of choku-nin and so-nin rank. These of shin-nin and choku rank may attend court ceremonies. The lower grade officials and foremen are of han-nin rank. Clerks and trainmen are of ko-in rank while the lowest paid hold yo-nin rank.

A tabulation of the monthly salaries for all the officials and employes in Yen (50c.) showing the percentage of increase during the ten years of government operation ending in 1917, is :

Official or Employes	No.	1917 Av. Y.	Pct. Inc.
President, directors, etc. . . . .	20	333.00	20.5
Higher grade Offici- als. . . . .	449	159.81	52.7
Lower grade Offici- als. . . . .	6,997	46.45	25.8
Railway foremen . .	883	39.45	*4.5
Clerks & trainmen .	30,597	19.66	5.9
Employes . . . . .	76,336	15.91	14.9
Total and averages .	Y.115,282	Y.19.54	17.4

\*4 years

In comparison with these salary figures, some other tabulations from the first year of government operation, the year before the war boom, and the last year available, are interesting :

TOTAL REVENUE.			
	1908-9	1913-4	1917-8
Y.	Y.	Y.	Y.
	69,775,16	113,447,055	183,525,143
Increase over 1908-9	43,671,894	113,849,982	
Per cent. over 1908-9		62.6	163.2

AVERAGE ANNUAL WAGES			
	Y.199.69	Y.225.84	Y.225.20
Increase over . . . 1908-9	26.15	55.51	
Per cent. over . . . 1908-9	13.1	27.8	

PERCENTAGE OF NEW EXPENSE INTO WAGES :			
	49.9	46.4	38.1

PERCENTAGE OF TOTAL REVENUE INTO WAGES :			
	25.3	22.3	17.5

The president receives a salary of Y.7,000 (\$3,500) a year. Some 7 miles of the road across the Usui pass with 26 tunnels and a 6.7 per cent. grade necessitating a rack-rail system, is electrified. It is planned to electrify much of the system, using hydro-electric power, but at present the elevated auxiliary lines around Tokyo and the interurban connecting with Yokohama are all that are finished.



# THE TELEPHONE IN CHINA

(Compiled from U. S. Commerce Reports  
and Independent Sources)

THE controversy as to the Shanghai-Hankow and Peking-Hankow long-distance telephone material contract, which (with the Shanghai-Chefoo submarine cable contract) involves electrical supplies to the value of about \$8,000,000, has occasioned many inquiries as to telephone developments in China. With the exception of the information regarding Shanghai 'phone services, the information presented here is taken from recent notes on the subject contained in the U.S. Commerce Reports.

Political unrest has been chiefly responsible for delaying the execution of the telephone contracts made while the Anfu party was in power. Money that should have been expended upon urgently needed public utilities has been squandered for political purposes of a dubious character. Meanwhile, municipal bodies in many parts of China are planning to put in 'phone systems and some headway will undoubtedly be made whether or not peace comes among the Chinese people within the immediate future. A writer in U.S. Commerce Reports says:

It is difficult for a foreigner to obtain a franchise to operate a telephone exchange in a Chinese city, though there is nothing to prevent such ownership and operation where the service is confined solely to an international settlement or concession. Again, while it is theoretically possible for a Chinese to obtain a permit from the minister of communications at Peking to operate an exchange, it is difficult to get such a permit, as the policy of the ministry seems to be toward government ownership of all communication facilities. Under the conditions that exist, there are four classes of telephone exchanges in the country, as regards ownership: (a) Those owned by the central government at Peking; (b) those owned by provincial or state governments; (c) those owned by private Chinese companies; and (d) those owned by foreigners.

The central government operates a number of telephone exchanges and a few stretches of toll line in China proper and South Manchuria, an 80-mile line between Peking and Tientsin being one of the most important. The largest exchange operated is that at Peking. All telephone and telegraph work is in the hands of the ministry of communications, and the department is not only averse to granting permits for the establishment of exchanges by others than itself but is buying up desirable properties as fast as it can finance the purchases. Telephone men in China state that the central government would take over all telephone exchanges and grant no further permits for private plants if it were able to obtain the money necessary to carry out its policy.

The various provincial governments operate a number of plants, the largest of which is at Changsha in Hunan Province. There are also a number of exchanges operated by private capital. One of the important cities with a privately owned Chinese exchange is Canton.

In the fourth class, where the ownership is foreign and the system operates within foreign settlements, there are probably a half-dozen exchanges, of which the one at Shanghai is by far the most important. The others are very small and more on the order of outdoor inter-communicating systems, which have been installed as a matter of convenience rather than as financial undertakings.

Most of the exchanges are magneto systems and the volume of business is in that type of equipment, though there are a few common-battery systems. In the future it is expected that for some years the greater percentage of the work will be magneto multiple with lamp signal supervision. In cases where magneto systems will



Shanghai "Central"

be replaced, engineers, both private and government, believed that regular manual common-battery systems would be adopted. They did not feel justified in taking up an automatic system in view of the extreme humidity in China. There is an opportunity to show that the automatic can be operated satisfactorily by arranging to install a small exchange and operate it for a short period, turning it over to the government at the end of the period of satisfactory operation. The government engineers did not appear to be antagonistic to the system, but they were frankly skeptical as to the possibilities of such a system operating well under their climatic conditions.

The outside construction of telephone systems in China is mainly overhead, with a large percentage of open wiring. Aerial cable is being employed to an increasing extent, however. In the matter of poles, etc., the situation is the same as was outlined in the discussion of distribution systems for central stations. Poles are cheap at points close to source of supply but relatively expensive in remote districts where transportation facilities are still primitive. Cross arms are used more than in power work, as would be expected, and brackets are employed only where a few lines are carried. Porcelain insulators are used practically to the exclusion of any others.

There is practically no toll-line development in China as yet, for two or three outstanding reasons. In the first place, the government, which under the existing ownership conditions is alone able to carry out a general toll-line scheme, has already a quite complete telegraph system connecting the cities where toll lines would be most desired. If toll lines are built the Ministry of Communications fears that the earnings of the telegraph system will drop off very much, while in many cases, on the other hand, there will for some time be hardly enough toll business to warrant the construction of toll lines. The two cities that would probably be the first to be connected and appear offhand to warrant immediate construction are Peking and Shanghai. While the government owns the exchange at Peking, the system at Shanghai is operated by a mutual company, foreign controlled, and arrangements satisfactory to both parties have not been possible so far. Naturally the building of a line and the installation of a few long-distance stations at the Shanghai end would not result in satisfactory service or considerable earnings. The Chinese



government owns a little toll line out of Mukden, and native merchants also own and operate lines connecting Mukden with surrounding towns. In addition, the Japanese government, in the name of the South Manchuria Railway Co., has built up a toll system in South Manchuria and has lines connecting Dairen, Mukden, Port Arthur, Fushun, Penhsihu, Kaiping, Newchwang, Changchun, and other towns in that territory within or near the South Manchuria Railway zone.

to practically nothing, and the United States and Japan are furnishing the market, with some Swedish and Norwegian goods coming in. One American company is selling boards and subscribers' sets made in its Japan factory, and other Japanese goods are being pushed. Notwithstanding the cheap labor of Japan, American telephone manufacturers can turn out instruments as cheaply as that country. At present it is said that if American manufacturers could make delivery they could take all the business.



"HELLO" GIRLS IN CHINA ARE USUALLY BOYS

Prior to the war American, German, British, and Swedish manufacturers were strongly in the market, with Japanese makers also competing, especially in South Manchuria.

In exchange equipment and in telephone instruments the German Siemens Co. was very active in working for the central government business and is openly accused of "squeezing" to secure favorable contracts. It was doing a fair amount of business when the war opened. The Swedish Ericsson Co. had most of the business

When normal conditions are re-established, it is believed that American telephone manufacturers will be able to compete readily for exchange equipment and subscribers' sets in the China market. Sweden should be the strongest competitor on a quality basis. While American instruments before the war cost about the same as the Swedish sets, it was said by officials connected with a large exchange that American switchboards were a little higher in price than Swedish, amounting to as much as 10 per cent. This occurred



BUT NOT ALWAYS—HERE ARE SOME OF THE GIRLS

in Canton, Hongkong, and Shanghai, in addition to other less important customers, and was a very strong competitor. Purely British companies did not do a great deal of this class of business, the British Insulated Wire & Helsby Cables Co. being one of the strongest in the field; but an American company sold a considerable amount of equipment and material made in its English branch factory. This American company also sold equipment made at a Continental branch factory.

Since the war began, competition from Europe has dropped

at a time when costs in the United States were abnormally high.

In intercommunicating telephones there is not much business open, though a campaign of education will, it is believed, show good returns. The only outfits seen were the British Sterling make, and for a five-point set the instruments cost \$32 Mex. c. i. f. Hongkong in the spring of 1917. A Chinese dealer stated that in pre-war times Siemens (German) sets for 10 stations cost \$19 Mex. each. American set of this kind are far superior to the foreign makes.

Before the war British and German cable held the market



## SHANGHAI TELEPHONE "CENTRAL"



THE OPERATING ROOM

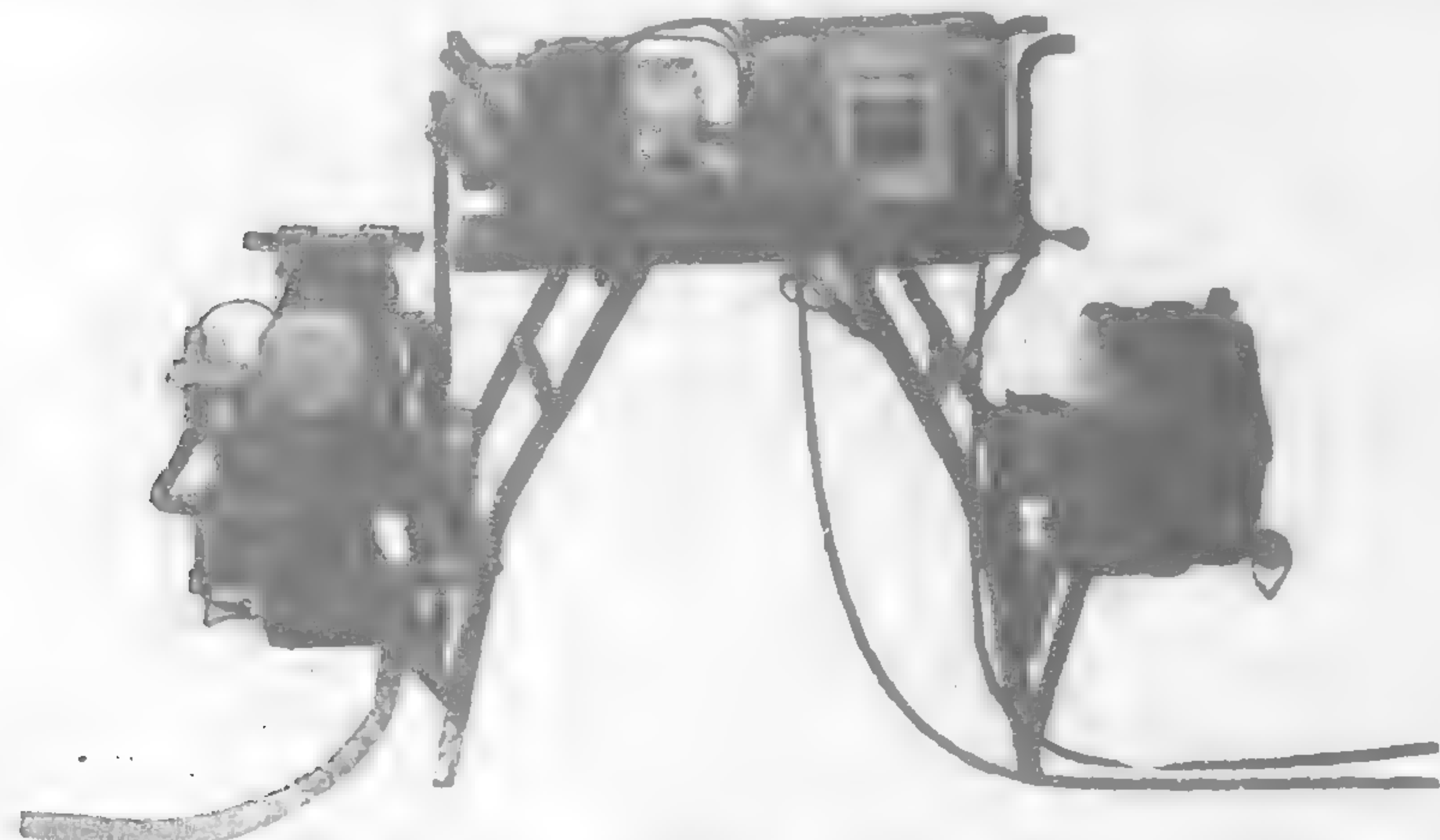


A CLOSER VIEW OF THE SWITCHBOARDS

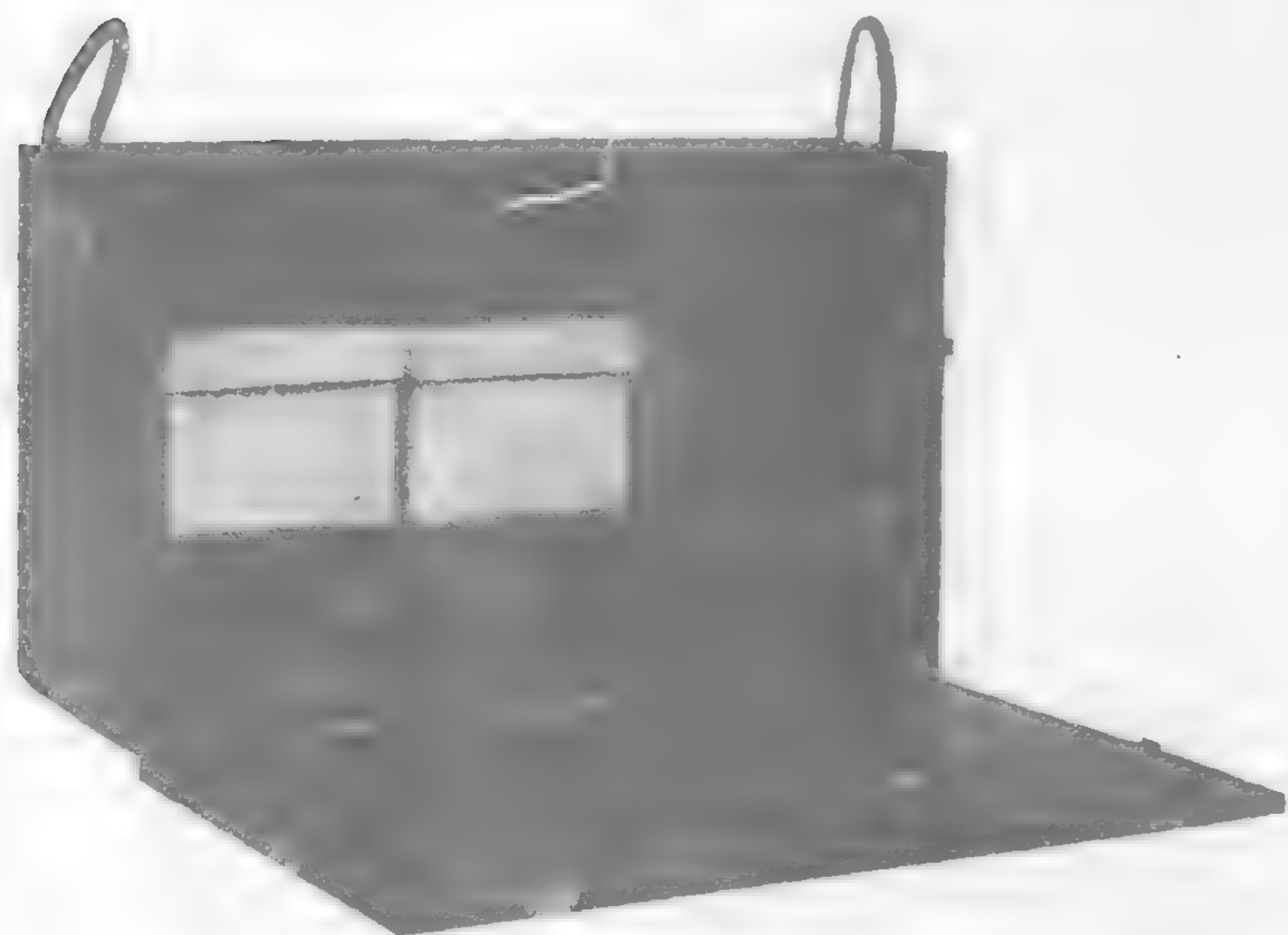


in China, an American company represented in China selling cable made in England, as British prices were said to be lower than American. One of the largest users of cable in China stated that American prices were generally 10 per cent. above those of British and German makers. On the other hand, an American telephone engineer in China said American manufacturers could compete with other

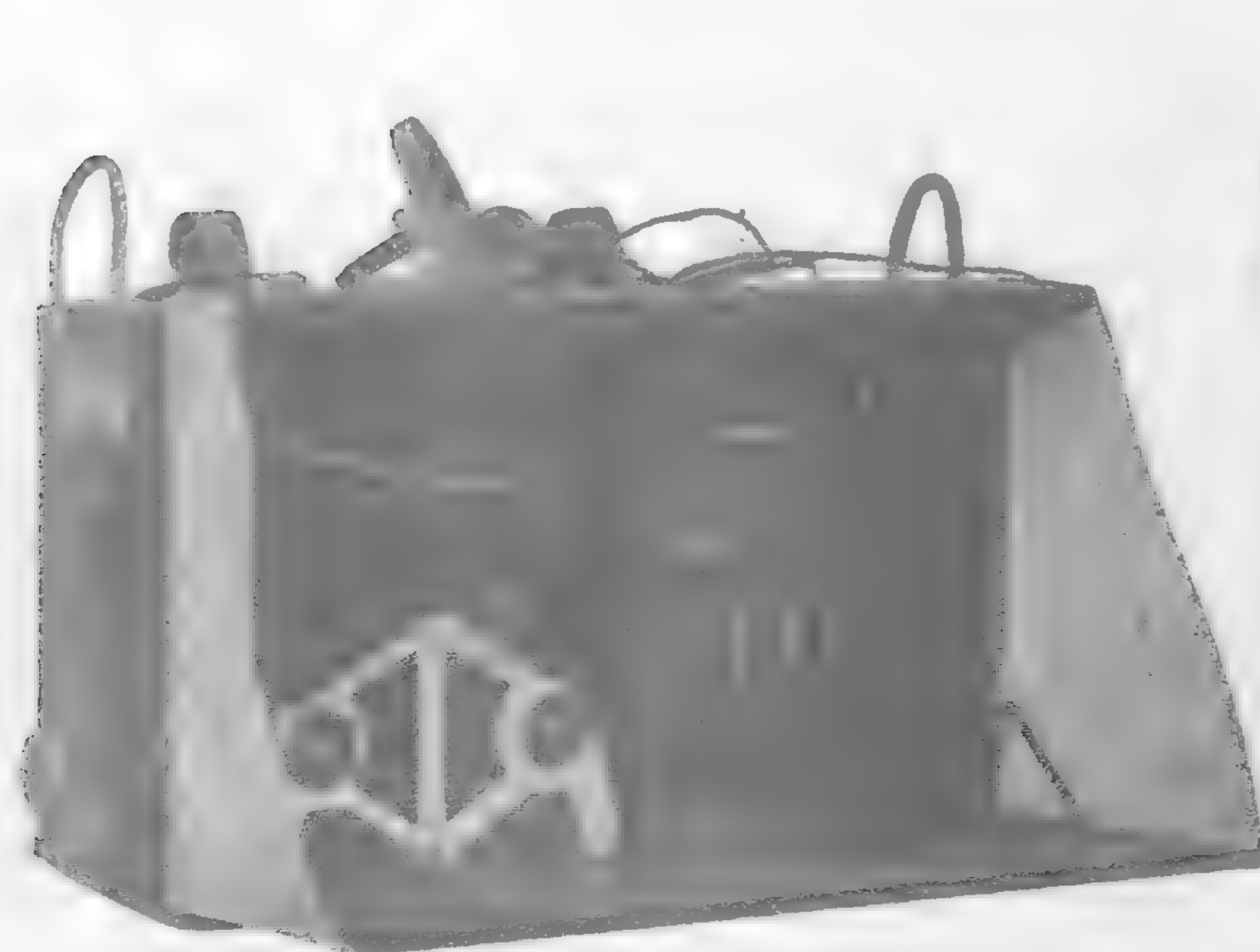
## CHINESE GOVERNMENT WIRELESS 'PHONES



Generating Plant, Chinese Wireless Telephone Set: Arranged for Carriage by Pack Horse or Camel. The Gasoline Engine on the left Drives the Alternator which Supplies the Necessary Current.



The Compact Sundries Box of the Chinese Government Portable Telephone Outfit



makers of telephone cable. From a knowledge of relative prices quoted in competition in other countries, however, it is not believed that American manufacturers can compete in this line unless some co-operative plan of buying of materials and of selling abroad is adopted. Since the war began Japan has been selling practically all the lead-covered cable used in China, and the Danish engineer in charge of the central government telephone systems stated that it fulfills the specifications both mechanically and electrically and is in general good cable.

A practice of German cable manufacturers may be of interest. As the cable was leaded, they stamped the measurement in the sheath at intervals of a few meters. This was very convenient, as in that way the amount of cable left on a reel could be determined at a glance. No sheath breaks have been traced to such stamping, nor has any other trouble resulted from it, and in China the high humidity makes the conditions for cable operation severe.

In other classes of line materials, besides cable, American manufacturers can furnish such items as steel pins and pole hardware to some extent, though much will be made up locally, as was noted in discussing power-distribution lines. Insulators will be furnished by Japan, with a strong probability that the Chinese ministry of communications will ultimately arrange for their manufacture by Chinese pottries. American manufacturers should be able, however, to do considerable business in pole cable terminals, junction boxes, protectors, etc., it is believed.

Japan will probably be a serious competitor in switchboard cords, etc., as it is giving satisfaction in these lines, apparently, where Japanese goods have been used. At Shanghai a special type of Japanese-made jumper wire was being used. The wire was enameled first and then rubber and braid covered in the usual manner. In the No. 20 S.W.G. (standard wire gauge, British) size this wire cost 3 tael cents per yard prior to the war; in June, 1917, the same wire cost about 6 tael cents per yard. Prices are c. i. f. Shanghai with duty paid.

## Shanghai Foreign Settlement

The telephones in the Shanghai foreign settlement, International and French, are operated by a local British concern (the Shanghai Mutual Telephone Co.) which has been in existence for twenty years; the first central exchange being opened on August 1, 1900, with some 120 lines. In 1907 a reinforced concrete six story building was erected and a new lamp-signalling magneto exchange installed; the transfer being made in 1908 for some 2,000 lines. In the winter of 1913 the then capacity of the exchange was reached, and extension for 2,400 lines was ordered, but owing to the war and the impossibility of obtaining the necessary material the extension was not completed until 1919, bringing the capacity up to 6,400 lines.

The company has three other exchanges; one in the western district having a capacity for 3,200 lines, a similar exchange of the same capacity in the northern district, and a small exchange in the eastern district with a capacity of only 400 lines. It has been decid-



The Receiving and Transmitting Sets of the Portable Chinese Government Wireless Telephones



## Past and Present Telephone Systems at Changsha



The Old Magneto Switchboard



The Present Central Battery Switchboard



Charging Machines and Wire Chief's Desk



Another View of the Charging Machines



The Power Control Board



Ringing Machines and Battery Panel

The present Changsha telephone system was installed by engineers sent out by the Western Electric Company and was put in operation in July, 1914, superseding a former magneto system. The accompanying photographs show the nature of the plant, which is arranged for a maximum capacity of 3,000 lines. It was inaugurated with an equipment for 1,000 local and 40 toll lines. Prior to 1914, Changsha had a magneto system with 350 lines. The principal charging outfit is a motor-generator set operating from the municipal current station. For emergency use, there is a generator belted to a gasoline engine at "Central."

ed to replace the east exchange by an automatic system which will be installed in 1921; and, should the experiment be successful, the remainder of the exchanges may, at a later date, be changed to this system.

Owing to the phenomenal increase in subscribers during the last year it has again become necessary to at once order material to extend the central and north exchanges, as deliveries either from Europe or America cannot be made under a year to eighteen months. This will bring the capacity of the system to 16,000 lines. About

11,000 lines are connected at the moment.

The exchanges are operated by Chinese operators, supervised by foreign women. From service records periodically taken, the service given compares favorably with other centres. The average time of answering a call, taken from 264 test calls is 5.7 seconds and the average time of disconnection, when the conversation is completed is 2.4 seconds. From the last operating report taken, the number of messages effected in one day amounted to 114,817, being an average of 13.5 per subscriber per day. Out of the above total 13,450 messages were effected during the busiest hour of the day.

The company maintains its own repair shops, where all apparatus is rebuilt and the concrete conduits for underground cables and all the metal work in connection with the outside lines, arms and brackets, etc., are made.

The rates charged are on a flat-rate basis, of Tls. 65.00 (Taels sixty-five) for business telephone, and Tls. 45.00 (Taels forty-five) for a residential telephone, per annum, within 2½ miles radius of the central office. A small installation fee is charged in each case, and higher rates, beyond the 2½ miles radius, according to the distance. Shareholders in the company's business are allowed a discount of 20 per cent. for each main line telephone for every four shares they hold.

The apparatus in the exchange is of British and American manufacture and the subscribers' instruments are mainly of Swedish manufacture. The lines are laid from the exchange to the distributing points in lead-covered dry core cables drawn into

multiple concrete ducts; the cables varying in size from 52 pairs to 306 pairs. These cables are then distributed aerially on poles by means of similar lead-covered dry core cables terminating in arrestor and fuse boxes, from whence they are lead to the subscriber by means of open wires and covered drop wires. The total staff employed including foreigners and Chinese is about 800.

In the Chinese city of Shanghai the Chinese government offers service to both business and private houses at a flat rate of \$4 Mex. per month. There are also telephone systems in the towns of





Settlement Exchange, Tsinanfu. Front view of Switchboard.  
Testing cabinet at the right.

Changchow, Hangchow, Kashing, Kunshan, Ningpo, Shaoshin, Soochow, and Wenchow, in the Shanghai consular district.

### Canton District

The only telephone system installed in the Canton consular district, aside from the railway telephone lines and a few small private lines with only a few subscribers each, is the telephone system of Canton. This is a government telephone under the control of the Kwangtung provincial government. The number of subscribers at the present time is 1,609, and the total mileage of single copper wire is 5,889. The exchange equipment in use is largely Japanese, manufactured by the Nippon Electric Co., of Tokyo, Japan. The telephones installed are of Norwegian, Swedish, and Japanese manufacture. The rate to subscribers is \$6 local currency per month.

In December, 1912, a contract was entered into with the Hongkong representative of the Swedish firm of L. M. Ericsson, of Stockholm, for the purchase of a complete exchange equipment, at a cost of \$287,000 Hongkong currency (\$143,500 United States currency), including 1,200 wall telephone instruments. This exchange equipment was to have a capacity up to 10,000 telephones, and to accommodate it the Chinese government erected a fine three-storied brick building on the Bund at a cost of approximately \$60,000 Hongkong currency (\$30,000 United States currency). This equipment was installed under the supervision of experts sent out from Sweden, the whole being completed some time during 1914.

The telephone company also purchased during 1915, 39 miles of lead-covered telephone cable, from the Standard Underground Cable Co., of Pittsburg, 39 miles of steel wire strand, from a New York company; and other miscellaneous telephone material from a Chicago company.

There has been considerable talk of establishing telephone exchanges in Fatshan, Kongmoon, Wuchow, and other cities in the interior, with a prospect of eventually linking up those cities with Canton, but nothing has been done as yet. It has also been proposed to establish telephone connections between Canton and Hongkong.

### Hongkong

The China & Japan Telephone & Electric Co. (Ltd.), incorporated in the United Kingdom, is the only telephone company operating in the colony of Hongkong and the New Territories. It is on the magneto ringing system, which is the one used to a large extent in the Orient, the instruments being manufactured by L. M. Ericsson & Co., of Stockholm, Sweden. The rental of each installation is £10 per annum for all places within one mile of the company's exchanges. Extension telephones up to any number in the same building are charged for at £2 10s. per annum each. The

banks, the leading honges, and a number of the hotels and boarding houses are equipped with sub-exchanges. On December 31, 1914, there were 2,973 telephones and 3,800 miles of single wire.

### Hankow District

There is a telephone system at Kiukiang with Kuling connection, but the number of telephones does not exceed a dozen.

A new system has recently been installed in Hankow, connecting the Wuhan cities, with a present subscription of 2,300 telephones and a potential system of 2,300 immediate and 10,000 ultimate capacity. The system has taken the place of the German system that was acquired in 1915 by the Chinese government. It was installed by the Nippon Electric Co., with Japanese and a small amount of American equipment. The plant is housed in a new building, and is modern in every particular. The schedule of rates is as follows for an unlimited service:

#### AUTHORIZED CHARGES FOR SERVICE

Instruments.	Initial fees.		Inside boundary Subscription per annum	
	\$	Mex.	\$	Mex.
Business telephone.....	15		84	
Private telephone.....	15		72	
Extension telephone under same roof.....	8		24	
Extension telephone up to 50 yards from main instrument.....	10		35	
Extension bell.....	5		II	
Three-line switch.....	6		8	
Five-line switch.....	8		12	
Eight to 100 line switch.....	(a)		(a)	

### Nanking

The telephone system in Nanking is a government institution and gives rather unsatisfactory service. The rates provide for a deposit of \$20 Mex. upon installation and a charge of \$5 Mex. per month to subscribers. The system connects Hsiakwan with the walled city. The subscribers are as follows: Government offices, 135; foreign firms, 14; Chinese firms, 22; others, 215. It is the common-battery system. The materials are purchased wherever possible. An efficient organization could treble the subscription list.

Complete specifications were drawn up in 1917 for a very modern telephone system, but early in 1918 bids had not yet been invited.

### Chungking: Chengtu

There are two small official telephone systems in Szechuan. A 50-line exchange for official use only was recently installed at Chungking. The telephones are British Insulated and Helsby Cables Co. The other system is at Chengtu. It is operated by the military authorities, but its use is extended to the public. Part of the system is Swedish Ericsson. A 200-line exchange of two 100-line Western Electric switchboards was installed in 1913 by Arnhold, Karberg & Co. According to recent reports 343 telephones are now in use. The rate at Chengtu is \$5 Mex. per month. The operation of telephones for the use of the general public is a government enterprise and is reserved to the ministry of communications.

### Changsha

Changsha is the only city in Hunan that has a telephone service. Seven hundred and fifty instruments are used and an extension of the service is already being undertaken. A charge is made for installing an instrument, after which the monthly rate is \$6 Mex. (about \$3 United States currency). The system in use in Changsha was purchased from the Western Electric Co. The telephone administration maintains a wire that connects Changsha with Siangtan, a city about 30 miles south of Changsha. Changteh is reported to be organizing a company for the installation of a telephone service. The Chinese have been quick to appreciate the value of the telephone and are introducing it wherever they can collect capital for the purpose. It is understood that the govern-



ment intends to take over the telephone lines of the various provinces and administer them with the telegraphs.

### Swatow

There are no telephones in this district, except two private lines—one a railway line connecting Swatow with Chaochowfu and the other a water-works line connecting Swatow with Chenghai. Several schemes for installing a system have been broached, but none have come to fruition. It is believed that a telephone system will be installed in Swatow some time in the near future.

### Foochow

There is only one telephone service in this district—that at Foochow. The local telephone company is privately owned, had 560 subscribers at the beginning of 1918, and does an annual business of more than \$10,000. The subscription for the ordinary wall instrument is \$60 Mex. per annum, and for the microphone style \$72 Mex. per annum. The company proposes to install all microphone instruments in the near future. There are two branch exchanges, six switchboards being in use—four of British and two of Norwegian manufacture. There are 20 native operators, no foreigners being employed in any department. Practically all of the supplies purchased are of either Japanese or European manufacture.

### Amoy

There is a telephone system in the international settlement on the island of Kulangsu, Amoy, under Japanese ownership and management. There are not more than 25 telephones in operation. In the city of Amoy there is a Chinese telephone company operating about 135 telephones. The equipment is from Japan. The service is charged for at the rate of \$4 local currency per month.

### Tsinan-Chefoo

Telephone services are maintained in Tsinan and Chefoo and owned and operated by the Chinese government. More than 500 telephones are in operation in Tsinan and more than 400 in Chefoo.

American telephone equipment is in use in Tsinan, and an American company has concluded an agreement with the authorities for the supply of all further materials needed for extension. The installation charge in Tsinan is \$15 Mex., with a rental charge of \$5 Mex. per month. The common-battery system is in use.

The original equipment used for the Chefoo installation is the common-battery system and was of Norwegian manufacture; all new material used comes from Japan. The installation charge in Chefoo is \$10 Mex. and the rental charge \$5 Mex. per month.

### Tsingtau

The telephone apparatus in use is that installed by the German administration, except that alterations have been made in conformity with methods in use in Japan and that replaced parts are purchased in Japan. The central exchange is provided with a multiple-series, magnetic switchboard with backboard of the Delville system. There are more than 700 telephones in use, and the use of telephones is increasing. The rates are \$25 Mex. per quarter for wall telephones and \$2 gold extra charge per quarter for desk telephones.

### Tientsin-Peking District

The telephone system in this district has been greatly developed in recent years. When first introduced, the telephone was patronized but little by the natives; now, however, it has proved itself to be as important a branch of communications as any other. The telephone is being widely used in all the cities and towns. Tientsin has the central telephone station of the province, and Peking and Tangku are substations. The number of telephones in Tientsin is 3,800 and in Tangku 60, and their number is likely to continue to increase as time passes. Applications for installations are always in excess of the supply of instruments available. In June, 1914, an improvement was effected in Tientsin by the installation of a mod-

ern metallic-direct plant and the merging of three small exchanges into one building.

In Peking there are three telephone exchanges, the exchange known as the east office also containing the administration. The number of instruments in present use is more than 8,000. As the service is still not sufficient to supply the needs of the city, it is intended to install a new exchange. Details of the telephone systems of Tientsin and Peking are as follows:

*Tientsin.*—Chinese Government Telephone Administration; Chinese government telephone system, with long-distance lines to Peking and Tangku; common-battery system; address, Chinese Bund, Tientsin.

*Peking.*—Chinese Government Telephone Administration; Chinese government telephone system, connecting with Tientsin and Tangku; common-battery system.

Tangshan, Paotingfu, and Kalgan have telephone services owned and operated by Chinese private companies. The system in each is the magneto, non-multiple. Besides, the railways in this district have their own telephone systems. These telephones are available to the public also on payment of a fee.

The quarterly subscription for one telephone in Tientsin is \$18, and for each extension \$6. The charge for conversation in one locality is \$0.10 for five minutes, and with other stations \$0.50 for five minutes within a radius of 40 miles. The charge for long-distance messages between Tientsin and Peking is \$0.80 for every five minutes. The materials in general use have been purchased in the United States and Germany.

### Kwangtung Leased Territory

The telephone system in the Kwantung Leased Territory is owned and operated by the communications department of the Kwantung government. The number of telephones in each city and the annual rates are as follows: Dairen, 1,560, \$42; Port Arthur, 317, \$36; Liushutun, 18, \$24; Chinchow, 12, \$24.

The department also operates, in the same system, 2,143 telephones in the cities along the South Manchuria Railway.

The system used is the usual one, with Japanese "central" girls. A subscriber must pay about \$50 to have his telephone installed and a number allotted him.

Practically all telephone and telegraph material and instruments are imported from Japan.

### Antung

There are only two cities in this district having telephone services, Antung and Fenghwangcheng. From Antung there is long-distance telephone service to Takushan, 50 miles distant; to Fenghwangcheng, 40 miles; and to Santaoangtow, 6½ miles. In Antung there are Chinese and Japanese companies, the former operating in the Chinese city and the latter in the Japanese settlement. The materials and instruments used by the two Antung companies and by the Fenghwangcheng company have all been purchased from Japan, and all instruments are of the magneto type. The number of telephones in use is as follows: Antung Chinese company, 250; Antung Japanese company, 427; Fenghwangcheng company, 36; total number in district, 713.

### Mukden

There are two telephone services operating in Mukden, one Chinese and the other Japanese. The Chinese service operates 900 telephones by common batteries on about 63 miles of wire. The Japanese service operates about the same number of telephones, though on more miles of wire. Chinese telephone systems are also maintained at Changchun, Kirin, Tieling, Kaiyuan, and other places. The Japanese maintain telephone systems at all the important cities and towns along the South Manchuria Railway. There are telephones for public use at all the post offices and automatic telephone stands at central points throughout each town, the charge in each case being \$0.025 per call. Moreover, the South Manchuria Railway maintains a long-distance telephone service along its main line and branches. Practically all of the telephonic supplies for these installations, Chinese and Japanese, were obtained from the Nippon Electric Co., of Tokyo, Japan. The monthly subscription to a telephone in the Chinese system at Mukden is \$3 gold; in the Japanese system, \$3.50.



# IN JUSTICE TO CHINA

## All Sides of the China Consortium Controversy

By George Bronson Rea

THE inevitable result of an overdose of secret diplomacy—the inexcusable delay in making public the full facts surrounding the objects of the new consortium—is now seen in the following letter from the Chinese minister of finance to the representatives of the consortium banks at Peking:—

November 26, 1920.

TO THE REPRESENTATIVES OF THE CONSORTIUM BANKS, PEKING.

GENTLEMEN,—In pursuance of our conversation at the ministry of finance on November 23, I deem it expedient, in order to remove any misunderstanding as to my personal attitude with regard to the consortium, to set down the following points:

1.—It is necessary that the government of China should at this juncture secure financial aid for constructive purposes.

2.—If the government is compelled to resort to foreign loans for this purpose.

(a) I personally cannot advise that any agreement embodying conditions calculated to establish a financial monopoly should be signed with any bank or group of banks; nor

(b) can I advise that any loan agreement be negotiated where the land tax of China should be set down as security and placed under foreign jurisdiction.

The consortium has been formed with the object of assisting China in her reorganization. China, particularly myself, heartily welcomes such evidence of goodwill on the part of foreign financiers, but expects that it will be manifested in a manner which will leave no doubt in the minds of the people of China as to the motives which animate the foreign bankers, and which will correct the impression now prevailing that their national freedom is being mortgaged.

Yours faithfully, [Signature]

(Signed)  
CHOW TSU-CHI,  
Minister of Finance.

The above was evidently construed by the bankers as a breach of the understanding binding the Chinese government to secrecy in the negotiations. It called forth an immediate but second-hand protest, containing a threat and couched in the following terms, vide *Reuter*:—

"Peking, Dec. 3.

"The representatives of the consortium have addressed a strong protest to Chow Tsu-chi, the minister of finance, in regard to his recent communication to the press, containing as it did matters discussed at a private meeting. Special exception is taken to the minister's letter in that, in the opinion of the consortium, it is calculated to mislead. The consortium's note refers to the meeting in November which Chow's letter mentions, and points out that

the general scheme of the consortium, and the reasons for its policy were then clearly explained. It denies that any proposal was made on behalf of the consortium "calculated to establish a financial monopoly," or that any mention was made that the land-tax in China should be set down as security for a possible loan, as is the impression conveyed by the finance minister's letter. In conclusion the consortium representatives ask Chow Tsu-chi publicly to correct the impression conveyed in his letter."

Here we are face to face with a situation that we have clearly foreseen since the days in Paris when the consortium bankers gathered together to discuss the invitation of Secretary Lansing to form the new combination.

Supreme efforts were made at that time by the writer to have due consideration given to the Chinese side of this matter so that when the time arrived to agree on a definite program the way would have been paved for its acceptance, without Chinese suspicion or reservation. The Chinese technical delegates in Paris, headed by Mr. Yeh Kung-cho, were keenly anxious to find some way that the proposed consortium plan could honestly be accepted by their government without loss of face or impairment of sovereign rights.

President Wilson was then forcing down the throats of his colleagues his ideas on the League of Nations, which, amongst other things, contained a clause about the abrogation of all treaties, conventions and understandings that in any way impaired the sovereignty of the member states. The Chinese delegates took it for granted that under this covenant their lost sovereignty would be automatically restored to them with recognition of their right to devise and control their own railway system. They had every reason to believe that their just claims would be heard, and that they would be permitted in courtesy to submit their ideas to the new consortium. If China was considered good enough to enter the League as a charter member on a plane of equality with the other states, then China's delegates naturally believed that this recognition of their sovereignty should take effect immediately.

China was entitled to consideration in Paris. She did not get it. She was refused a hearing.

In sum, the Chinese doubtless feel that while consortium proponents profess abundant friendship towards China, at no time have the hard facts (as they have seen them) confirmed these protestations. Just as the majority of Chinese shared Wellington Koo's personal humiliation because the Chinese minister at Washington was ignored during the Lansing-Ishii negotiations, so also has it been apparent for some time that Chinese officials and business men were becoming more and more impatient of any and



MR. CHOW TZU-CHI,

China's Minister of Finance and Chinese Sponsor of the Plan of 1914.



all foreign conferences on Chinese matters, with the Chinese on the wrong side of the door. Recently, there was much Chinese indignation when certain consortium communications were printed in Chinese and foreign newspapers, supposedly under inspiration that had not come from Peking sources. From the purely Peking viewpoint, the revival of the Canton government could not be overlooked. When Dr. Sun departed from Canton, all hope of immediate Chinese official acceptance of the consortium proposals faded into the blue sky. Had Mr. Chow and Peking manifested eagerness or willingness to agree with the views of the foreign bankers, there is not the least doubt that Dr. Sun would have come out with a stirring denunciation and the Chinese in the mass would have rallied behind Sun.

As to the proprieties, there is this to be said. From Paris to Peking, from Washington to Tokyo, from Peking to New York, the path of the consortium has been paved with burrs in the shape of half-statements, semi-authorized statements, inspired statements and damphool leaks that have not made for harmony. Most of the time, the Japanese were the objectives of the organized press attack, which, of course, could not have been fathered by really responsible people. Also, Mr. Chow could reasonably plead that, taking these purely Chinese domestic circumstances into consideration, Mr. Wilson (the foster father of the consortium) had set a signal precedent that came pat to the Chinese emergency. The President's famous "epistle to the Romans" of April 23, 1919, so roundly denounced by Signor Orlando was not less a breach of etiquette than the letter of Mr. Chow. That seems to be the Chinese view of it, at all events; and surely the Chinese might say to their critics: "Are we not entitled to protect our own credit? While our government is tottering, beset with popular suspicions about our dealings with the foreign bankers, have we lost our right to set ourselves straight with our own people?"

Minister Chow reflects the sentiment of China. It was a foregone conclusion that the Chinese government could not readily accept any terms or conditions which in any way seemed to undermine the few remaining props to its administrative independence; and, notwithstanding the undoubtedly sound and sincere arguments in support of the consortium's insistence upon adequate safeguards for the proper expenditure of future loan funds, the Chinese have strong, legitimate reasons for opposing any scheme, no matter how altruistic, which to their mind, might tend further to imperil their liberty of action.

There are always two sides to any case. In this controversy between China and the bankers, there are three sides: the Chinese side, the consortium side, and the right side. In addition, there are as many angles as there are nationalities and concessions involved. We know the high lights of the consortium side through the occasional revelation of facts disclosed in some official, semi-official, or purely officious document released in order to support or clarify some special point or phase of the negotiations. The full facts of the negotiations, from the inception of the idea to the organization of the combination, still elude the searching rays of the limelight of public scrutiny. Over two months have elapsed since the Chinese government was presented with the consortium dossier and the accompanying caution that it could not be released for publication without the full consent of all the Powers concerned. In the meantime this

hang-over from the secret methods of old diplomacy is paving the way for the undoing of carefully laid plans. This conspiracy of silence has permitted opponents of any sort of Far Eastern order to conduct a vicious campaign against Japan, and at the same time to mislead the ignorant Chinese masses as to the real objects of the consortium. A prolongation of this mysterious official secrecy can only result in complicating the entire situation and in seriously impairing the efficiency of the international compact. Let us take a look at China's side of this problem, as outlined in part by the letter of Minister Chow to the consortium banks. To those familiar with the facts of the past ten years it is clearly evident that the old maxim, "chickens come home to roost," still holds good.

Mr. Chow Tzu-chi, at present China's finance minister, was also the head of this ministry under Yuan Shih-kai in 1913-14. He was responsible, at that time, for the patriotic attempt to take the railways out of international politics and to eliminate the spheres of influence through international co-operation. It was Mr. Chow who sponsored the plan and obtained the approval of President Yuan and his cabinet. China proposed to organize an international company that would finance and construct well-thought-out and approved system of national railways, not to exceed ten thousand miles in length. It was under his guidance that, in April, 1914, the company was successfully organized in Paris, and to him was forwarded the official letter of the Wilson administration that trampled upon the claim of China to take any steps on her own initiative for the protection of her sovereign rights. On this page is presented for the first time, this historic document, which must stand as an indictment of insincerity against an administration whose amateur diplomats are largely

responsible for luring the Chinese junk of state into the shoals and reefs of a shark-infested sea of trouble. In reading this communication, the fact must be borne in mind that every move of the Chinese authorities leading up to the presidential authorization to organize the company was fully communicated to the American minister at Peking and that the state department was kept informed by the minister who supported the Chinese proceedings.

The Chinese government confidently relied on American support of this meritorious plan to protect China through the organization of an international constructive consortium under which the Chinese would receive equitable participation in the profits. The negotiations leading up to the organization of the company in Paris were carried out without a hitch. The Chinese received the most favorable terms ever accorded by international finance to a foreign government for the construction of its railways. The British and French financial groups cordially supported their constructors. The death-blow to China's aspirations came from the state department, which, in response to an inquiry from the American participant in the company, sent the letter that is here printed over the signature of Mr. Lansing.

That letter speaks for itself. It constitutes an official denial of China's right to initiate any international scheme for her own protection. It must remain as damning evidence of the wobbling insincerity of that autocratic administration now passing out of power. Four years sped rapidly, and what in 1914 was denounced as highly illegal and contrary to treaty provisions, has now, in a modified form, become most praiseworthy and legitimate. The treaties that were invoked to impede China from entering into a railway contract for ten thousand miles of new lines, apparently worked *one way only*. Were they made by the strong to throttle the weak? They could not be invoked to oppose the organization of a new international consortium under the direction of the Wilson administration. What China could not be permitted to undertake, in 1914, was coolly handed over by President Wilson to the new international consortium called into being at

his express invitation. This may be justice to China; it may be living up to our traditions and protestations of friendship; it may and can be defended on practical grounds, at this late date; but at the time the decision was rendered it was a "raw deal"—a complete reversion of our much advertised concern for the sovereign rights of small or weak nations. Some day, when the next administration is seeking material to expose the incompetency of the despotic regime now passing into history, an investigation may be conducted into the conduct of our Far Eastern diplomacy during the past eight years. The ramifications of "Dollar Diplomacy" under the cloak of benevolent altruism in the Far East will make a most interesting contribution to political history.

The Chinese have long memories. We cannot expect Minister Chow personally to accept a situation, which, to his mind, seems to imply the creation of a financial monopoly to carry out the work that China was prohibited from doing herself when she had the opportunity. All the sympathy and good intentions in the world cannot wipe out or atone for the blow that killed China's hopes of settling her own railway affairs in 1914. If the Chinese government adheres to the stand that the new consortium is a "financial monopoly" whose chief function is

to advance the funds necessary for railway and industrial development its position is impregnable. China can safely go before the League of Nations, the Hague Tribunal, or any conference of the Powers and prove that her sovereignty was ignored and over-ridden in 1914, when the state department placed itself on record in denial of China's right to take measures for her own protection; and that then, four years later, the self-same autocratic state department "Chief" turned secretly and invited the organization of a new international financial combination to carry out the work that China was prohibited from doing herself. As long as Minister Chow maintains this position he is on solid ground; and if it has the courage his government would be fully justified in calling upon the United States government for a full and public explanation of its attitude of 1914. The above is only one angle to the Chinese side of the case. It is sufficient for present purposes.

The consortium side of the case may be summed up as a determination on the part of international finance to surround future Chinese loans with essential guarantees for their proper expenditure. Some of these conditions may appear unduly harsh and subversive of China's administrative independence, but China has only her own officials to blame for this situation. The American angle to the consortium controversy, divested of all superfluous verbiage, is, that only through international co-operation can American capital operate at all in China and so assist in preserving the few remnants of sovereignty left to this unhappy nation. Twenty years ago, America adopted the "Open Door" doctrine (first propounded as a national policy by Sir Michael Hicks Beach) to provide equal opportunity for the trade and commerce of all nations and to guarantee the integrity of

DEPARTMENT OF STATE  
Washington, D.C.

May 16, 1914

SIRS,

In reply to your inquiry as to the attitude which this government would take towards an enterprise of the character proposed by Dr. Chen, that is to say the organization of an international construction company for the financing, construction and equipment of future government railways in China, I have to state that the information furnished the department seems to indicate an intention on the part of the Chinese government to grant the proposed company a monopoly of railway construction in China. If this understanding be correct, the proposed plan would appear to be in violation of treaty provisions which forbid the establishment of monopolies.

The department is earnestly desirous of promoting the extension of American trade in foreign countries by all proper means, but cannot give its support to any enterprise which implies an exclusive right upon the part of any one company or group of companies to build and equip railways in any part of the world.

I am, Sirs,

Your obedient servant,

For the Secretary of State,

ROBERT LANSING,  
Counselor.



China. Since then, America has learned that it is difficult to safeguard the liberties of a nation whose corrupt officials insist upon secretly surrendering and bartering away its sovereignty. It was at last forced upon practical Americans that it was impossible to protect a people who would not protect themselves, and whose officials abused American friendship and sympathy by secretly conspiring to create situations that might compel us to come to their armed assistance in defense of their integrity. It has been extremely unfortunate that the affairs of the United States for the past eight years have been directed by a dictatorial dreamer, who surrounded himself by men of his own ilk. If the Democratic administration had possessed one strong, practical statesman to direct its Far Eastern affairs, the Chinese government would have been told frankly and firmly that there was a limit to sentiment, that China would have to make some earnest effort to reform and defend herself, in order to merit the continued support of America.

Instead of this masculine advice, the Chinese have been led to believe that if they only shouted loud enough and long enough, the great American people would respond to their sentimental appeal, take up arms in their behalf, crush Japan, humiliate Europe, and usher in a new epoch of Chinese "greatness" and grafts, under the directing genius of American literati. These sentimentalists of the Wilsonian school over-played their hand. They led the Chinese to defeat and humiliation and overlooked that real American sentiment so forcibly and characteristically expressed by President Roosevelt in defending his refusal to interfere in Japan's annexation of Korea:

"TO BE SURE, BY TREATY, IT WAS SOLEMNLY COVENANTED THAT KOREA SHOULD REMAIN INDEPENDENT. BUT KOREA HERSELF WAS HELPLESS TO ENFORCE THE TREATY, AND IT WAS OUT OF THE QUESTION TO SUPPOSE THAT ANY OTHER NATION WITH NO INTEREST OF ITS OWN AT STAKE WOULD DO FOR THE KOREANS WHAT THEY WERE UTTERLY UNABLE TO DO FOR THEMSELVES."

This is the essence of modern international political morality. If Americans would not do for 15,000,000 Koreans what they would not do for themselves, how much more unlikely are they to fight on behalf of 400,000,000 people whose leaders refuse to take one manly step in defense of their own liberties. Especially is this so when their disorganization and inefficiency is a constant invitation to trouble. Here then we have the basic argument in support of the consortium. International co-operation to eliminate international competition, and so make impossible in the future a conflict of interests that might lead to hostilities. Again, the Chinese people can blame only their own officials, who have insisted upon secretly signing away their rights, and then entering into contracts with ill-advised Americans, who, in turn, expect their government to enforce the doctrine of the "Open Door." It cannot be done. All the appeals of literary diplomats, self-seeking advisers and yapping paid pipers, will never induce the American people to go to war in defense of the liberties of a people who might be encouraged to fight for themselves. Hence, the consortium.

To China's side and the consortium side, may be added the British side,

the French side, the Japanese side; and, lastly, the right side. The communication of Minister Chow to the representatives of the consortium banks tells us that China and the friendly Powers are headed towards an *impasse*. Neither side can surrender its position with dignity. The Chinese government dares not face popular resentment by accepting terms and conditions, which, although absolutely essential to its reorganization and stability, imply a further impairment of its administrative independence. The consortium, as trustee for the bondholders, must insist on conditions that will adequately safeguard their investment; and, above all, they must always have in mind the international political situation, and act in full harmony in order to terminate the scramble for concessions under a continuation of the delusive "Open Door" doctrine, which can only lead to further international complications, possible eventual hostilities; and, in the end, to the extinction of China as an independent state. For these reasons, THE FAR EASTERN REVIEW supports the consortium.

What is the solution? What is the right side? How can China's sovereignty be preserved intact, while accepting the terms and conditions of an international consortium? The Publisher of THE FAR EASTERN REVIEW pointed out the honorable solution to the Chinese and the consortium leaders in Paris, last year. His recommendations were approved by the Chinese technical delegates, headed by the present minister of communications, Mr. Yeh Kung-cho, and submitted to Mr. Lamont and the bankers. This solution was ignored, swept aside and condemned as a resurrection of the 1914 scheme which recognized and preserved China's sovereign rights to develop her railways in her own way. Who was responsible for again destroying China's one hope to regain sovereignty over her railway system? Not Mr. Lamont, nor the bankers. They were merely the instruments of the administration, guided at every step by definite instructions. The memorandum, which received the full approval of the Chinese delegates as a basis for negotiation, was referred to an official of the state department then in attendance at the Peace Conference, the same official who was responsible for denying China's right to protect herself in 1914. The memorandum was returned to Mr. Lamont, blue-pencilled with the words "Their Old Monopoly." China again lost her opportunity, out of a spirit of petty jealousy on the part of department officials who resented the interference of a Republican, outsider in a matter that they considered to be their own private monopoly. The Chinese have showered honors on these same literary advisers; they believe in them and they trust them.

If the Chinese desire to test the real friendship of these advisers, we suggest that the plan outlined by the Publisher of THE FAR EASTERN REVIEW, and which received the endorsement of their delegates at Paris, be made public as a basis for discussion and negotiation with the consortium for the full recognition and restoration of China's sovereignty over her transportation system. The Chinese people will then be able to judge for themselves who are their real friends, the sentimental sinologues upon whom they have leaned during the past few years, or the practical far-seeing Americans whose efforts in their behalf have been blocked and nullified for eight years by idealism run wild?



The Curtiss Arrow

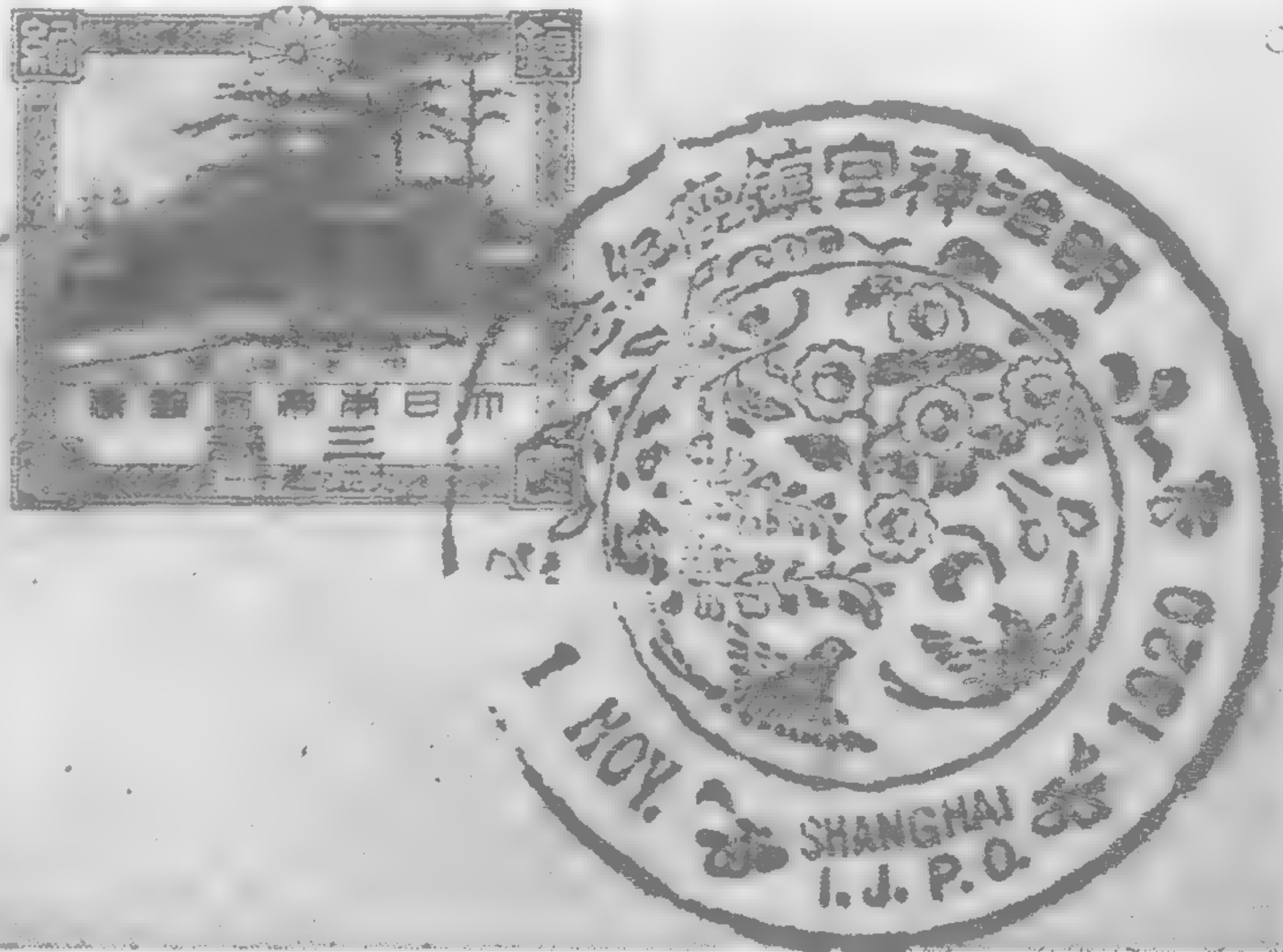
That participated in the Gordon-Bennett trophy races recently in France. The machine was built by the Curtiss Aeroplane and Motor Corporation at Garden City, L.I., New York, for S. E. J. Cox of Houston, Texas, who entered it in the races in the name of the Aero Club of Texas. It has been christened the "Texas Wild Cat."

It was flown by Roland Rohlfs, Curtiss test pilot and holder of the world's altitude record for standard-equip plane and motor. Clarence Coombs, former army sergeant and famous cross-country pilot, was alternate. The machine has a wing spread of 25 feet, 6 inches; is 19 feet, 3 inches in length; weighs, with full load, 2,200 pounds. It has a Curtiss twelve, 400 horse-power motor. It is a monoplane and was conceived, designed, tested, built and actually flown within two months after Mr. Cox

placed his order—an achievement which has never been equalled. With large wings used for testing at the Curtiss Aviation Field, it established a new American speed record of 183 miles per hour.

## Japanese Commemorative Stamp

IN commemoration of the birthday of the Emperor of Japan, the Japanese post office at Shanghai issued 1½ sen (violet) and 3 sen (carmine) stamps, on November 1, as illustrated here. *Stamp Topics*, the official organ of the Shanghai Philatelic Society, edited by Mr. Theodore Siddall, a popular veteran of the American Far Eastern community, says: "We suppose these stamps were also placed on sale in Japan, but the number available must have been quite small, as we have seen none coming through on mail. Both issues seem to be quite scarce." There has been quite a large demand for the issues in Shanghai.





## Bang! Another Door Closed

### British Coal Monopoly in Kwantung Province

PEKING, November 1.—(Special correspondent)—Certain negotiations which may give British interests economic and political control of Kwantung, the richest province in China, were disclosed when Chinese government officials at Peking received copies of an agreement signed by officials of the former South China government, says the *Japan Times*. Though British officials in Canton and Peking are said to have shown friendly activity, there is nothing in the agreement to indicate that their government was back of the negotiations. There is a fertile field of surmise whether the agreement, if carried out, is a step towards a further partition of China and how it will affect the interests of other powers in that country or its relation to the Anglo-Japanese Alliance or to the new Consortium.

One Canton official who was not a party to the agreement says that another official received \$100,000 in Hongkong currency, as a first payment, before he affixed his signature. The Kwantung revolution then called a halt in the proceedings.

However, it is understood that Wu Ting-fang, Sun Yat-sen and Tang Shao-yi, momentarily on the crest of the South China political whirligig, are in an equally receptive mood as their predecessors who signed the agreement for the provincial and military governments.

The agreement which is dated the "ninth year of the Chinese republic, 23rd day, 4th moon" (April 23, 1920), is signed by Mu Yung-hsin, military governor, and Cheung Kan-fong, civil governor, with their private chops and official seals for the government, and by Major Louis Cassel (retired), described in the agreement as "an officer of the Most Excellent Order of the British Empire," and Sum Pak-ming, a resident of Hongkong, for the other contracting parties.

In return for the payment of \$1,000,000 in Hongkong currency, in two installments of \$100,000 and \$900,000, and the carrying out of certain conditions specified in the contract, a syndicate to be known as the Kwang Tung Collieries, Limited, secures the coal mining monopoly in Kwantung province for 90 years or more. This much is plainly specified in the agreement. Those who have studied the documents say they are so worded that the syndicate also can take over all railroad, highway, or water transportation at anytime, giving it practical control of the province. The agreement specifies that the syndicate must be in British control.

Section 15, is the portion of the agreement which the Peking officials point to as giving the syndicate much vaster powers than a mere coal monopoly of the rich province. That section reads:

"The said company when incorporated, shall for the purpose of its business, be entitled to use any waterways, wharves, ports, railways and other means of transport, or storage now existing in the Kwantung province; and also to construct, manage and superintend and work any other roads, railways, waterways and buildings as may be deemed advisable for the purpose of the business of the said company, or to improve those now existing but shall pay reasonable remuneration or compensation to any individual or individuals affected, or prejudiced, by such use of construction."

The two most important railroads in Kwantung province are the Canton-Kowloon railway, a British owned line connecting Canton and Hongkong, and the Canton-Hankow railway which is expected to be ultimately a part of the through rail route between Hongkong and Peking.

The agreement gives the syndicate the coal concessions in the districts specified as "Nam-hoi, Pun-u, Tung-koon, Po-on, Sam-sui, Fa-yuen, Ying-tak, Young-shan, Lin-yuen, Kuk-kong, Ching-yuen, Lok-choong, Yue-yuen, Yan-fa, Chee-hing, Nam-hung, Fat-kong, Yung-yuen, Ko-ming, Tsang-shing, Tsung-fa, etc." The abbreviation "etc." is believed to cover any districts not mentioned by name. No further concessions to prospect or mine, not specifying coal alone, are to be given to any other individuals or companies in the same districts.

The syndicate also becomes the owner of all coal mines in the province which are not being worked at present and the holder of all concessions on which work has not been started. The government further obligates itself to "render all assistance as it is able to enable the company to acquire at a reasonable price" the concessions or mining rights of companies which now are working their properties on a commercial basis and consequently cannot be forfeited. The agreement specifies fifty different companies and the grants on which they have started work in the province. It names six others and their grants on which work has not started and which are subject to forfeiture. The agreement specifies that the new syndicate shall conform to the local mining laws but shall not pay any higher duties than does the Kailan Mining Administration.

The syndicate is to have a nominal capital of \$10,000,000, Hongkong currency, divided into 1,000,000 shares. Half of these are to be known as "A shares" which are to be disposed of by four directors of British nationality. The remaining half are classified as "B shares" and are to be considered as "fully paid up." The agreement specifies what disposal shall be made of 200,000 of the "B shares," and allots the remaining 300,000, representing \$3,000,000, to three directors of Chinese nationality. Half of the 200,000 shares are to be divided equally for the benefit of the poor and the educational institutions of Kwantung province.

The \$1,000,000 preliminary payment to the Kwantung officials is eventually to be paid by with 6 per cent. interest out of the government's share of the concession's profits. In order to guarantee this the other 100,000 shares, valued at \$1,000,000, in the 200,000 block, are set aside as an amortization fund. The system of financing is somewhat complicated. Each year the 6 per cent. interest on the \$1,000,000, or on that portion of the \$1,000,000

remaining unpaid, is to be deducted from any dividends due the government. In addition, 4 per cent. interest on the same sum is to be deducted from the same dividends for the amortization fund. As fast as the \$1,000,000 debt is repaid in amounts of \$10,000, an equivalent number of the 100,000 block of shares are to be released to the government. Obviously if the 4 per cent. continues at \$40,000 each year the \$1,000,000 will be repaid in 25 years. If it is computed on the unpaid balance of the \$1,000,000, 96 per cent. will remain unpaid each year and the debt will never reach the vanishing point.

In case the dividends are not sufficient to provide for these interest allotments, the government is absolved from paying them out of its own funds. The agreement specifies that out of any profits all working expenses shall be paid first, and after that a royalty of not exceeding \$1, a ton on all coal mined or dealt with, reasonable expenses of the staff, sums properly payable to the Kwantung government, 8 per cent. interest on the capital represented by the "A shares," and the remainder divided equally in dividends to the holders of "A and B shares." The holders of "A shares" are in line for both an 8 per cent. and a supplemental dividend.

Though some officials say that the first payment of \$100,000 has been made and gone the way of many political-promotion ventures in China, the agreement provides that after the first papers have been signed, chopped and sealed, the syndicate shall take all such steps necessary to secure the official sanction of the Peking government and deposit the \$100,000 after that sanction has been approved. It is understood that various officials have been active in Peking in this direction but that the official sanction has not been granted.

After the \$100,000 has been paid the syndicate is to have 9 months in which to further investigate the mining prospects in the province. If it decides to continue, it must pay the remaining \$900,000, and start within 11 months, though there are liberal conditions for extending the time. If it cannot continue it forfeits the \$100,000. However, if it does start work and goes into liquidation, the government must return the \$1,000,000.

The syndicate is to be controlled by seven directors; three of "European nationality" elected by the holders of "A shares," three of "Chinese nationality" elected by holders of "B shares," and one of "British nationality" elected by the preceding six. The staff is to have a European manager, European engineers and supervisors, a European secretary, a Chinese secretary and Chinese miners and laborers, the latter so far as possible natives of Kwantung province.

The agreement is written in both Chinese and English, though specifying that in case of dispute the English copy shall prevail. Under such circumstances, the British and Chinese directors shall each appoint an arbitrator who will select an umpire "not of British nationality." The signatures of the two former Kwantung officials were affixed in Canton while those of the two British representatives are witnessed by Ho Shing-chong, a notary of Hongkong.

## Cotton Spinning Mills in Japan

### Capital, Spindles, and Looms.

	June 1920	June 1919	June 1918
Number of Companies	56	48	41
Number of Mills	198	184	170
Total Capital	Y.315,427,650	Y.202,177,650	Y.176,202,650
Paid Up Capital	Y.248,180,420	Y.147,157,670	Y.127,055,220
Reserve Funds	Y.153,923,002	Y.110,447,795	Y. 71,457,603
Number of Spindles	3,689,640	3,335,084	3,116,832
Number of Spindles for Thrown Yarns	434,736	400,307	383,074
Number of Looms	49,826	42,400	37,607

### Consumption of Raw Cotton.

Kind.	1st Half, 1920	2nd Half, 1919	1st Half, 1919
	<i>Kwamme</i>	<i>Kwamme</i>	<i>Kwamme</i>
Indian Cotton	29,865,047	25,330,178	19,867,649
America Cotton	20,849,485	21,678,204	20,992,502
Chinese Cotton	2,654,674	6,314,283	9,402,140
Egyptian Cotton	880,922	958,542	912,127
Annan and Saigon Cotton	210,698	113,377	158,458
Korean Cotton	697,113	734,937	639,600
Other Cotton	322,346	254,311	350,151
Total	55,480,285	55,383,832	52,322,627

(One Kwamme equals 8,267-lbs. avoirdupois.)

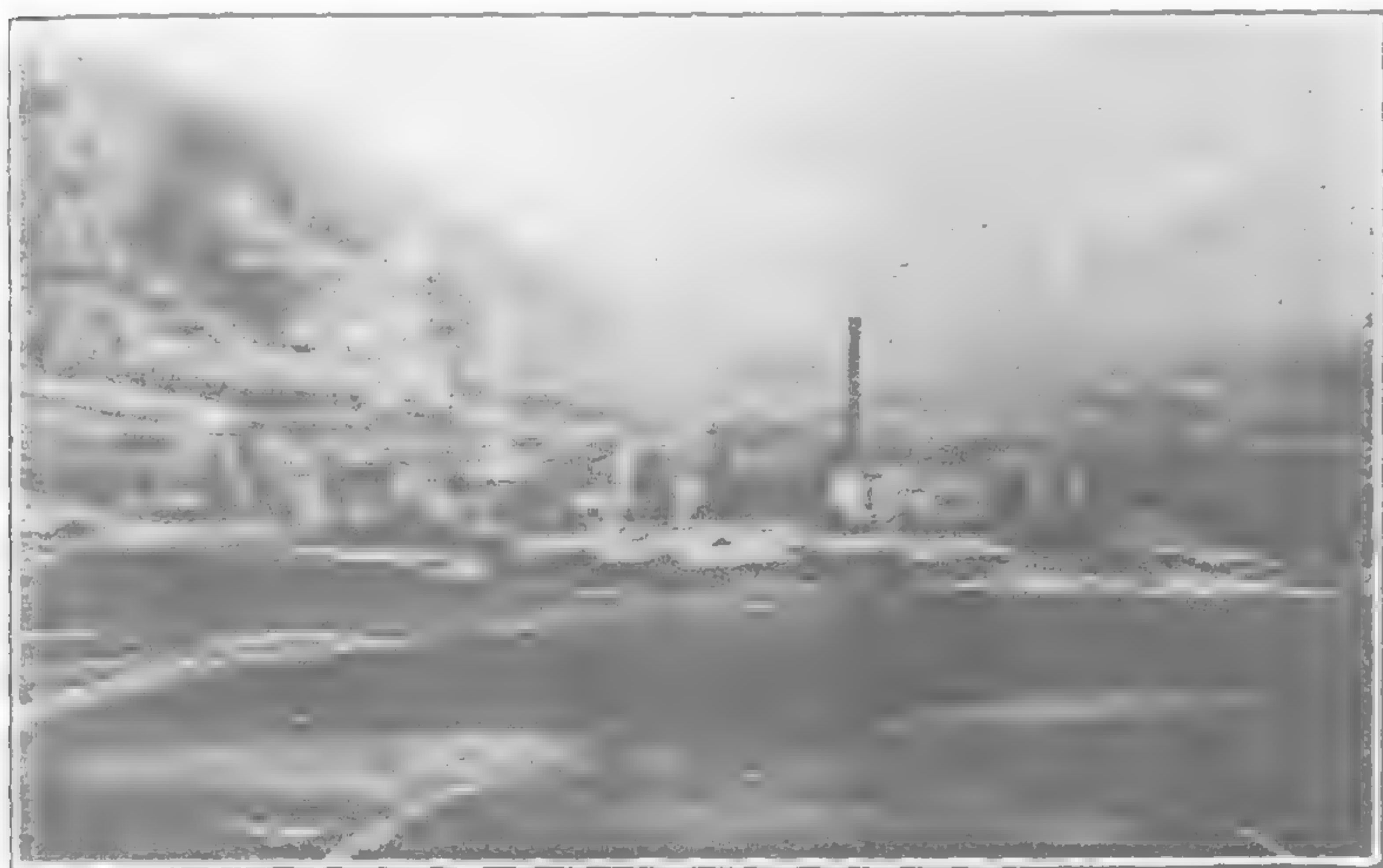
### Condition of Business.

	1st Half, 1920	2nd Half, 1919	1st Half, 1919
	Yen	Yen	Yen
Fixed Capital	167,640,261	142,981,137	130,178,162
Amortization of Fixed Capital	10,805,337	11,325,883	9,249,657
Brought Over from the Previous Term	31,729,868	29,313,699	26,086,320
Net Profit for the Term	102,485,120	73,047,647	55,571,065
Dividend for the Term	59,536,456	41,371,506	35,617,173
Carried to Reserve Funds for the Term	36,262,311	25,732,507	17,165,082
Carried Forward to Next Term	38,416,221	35,257,333	28,875,130
Average Rate of Dividend for the Term	48.4%	51%	49.9%



# Japanese Paper for American Newspapers

**I**N the October number of THE FAR EASTERN REVIEW it was pointed out editorially, if not nagged and handicapped at every step in the development of Eastern Asiatic resources, Japan might prove to be the savior of the American newsprint situation. It is manifestly impossible for the American and Canadian mills to supply the present enormous demand, and even if this could be done at a reasonable price, the rapid disappearance of the timber supply must compel the opening of new pulp sources. The American market has been quick to seize on this prospective relief from the prevailing high



Plant of Chosen Pulp Manufacturing Company, Kiho, South Keisho Province.

prices and enquiries and orders are pouring into Japan from all quarters. The Fuji Paper Mill has received orders from New York for the delivery of 1,000 tons of newsprint paper per month, for six months, 3,000 tons of Manila paper from San Francisco, and another 60,000-ton order for newsprint paper from New York. The present capacity of the mill will not permit the acceptance of such a huge order, which can be booked only on condition of awaiting the completion of its new factory now under construction.

The Saghalien pulp mills are reporting excellent business, due to their low cost of operation permitting them to undersell the American and European mills. An order for 1,000 tons of pulp was recently received by the Nippon Kagoku Shiryō Kaisha for American delivery. A most interesting pulp enterprise has been started in Korea, where marsh reeds are being utilized for pulp making. The experiment was first tried in 1913 by a Japanese at Kiho on the Rakuto River, and the enterprise later taken over by a prominent firm who organized the Chosen Pulp Manufacturing Company. A large plant has been erected and the output for the first year was 475 tons valued at Y.130,000. This pulp is largely used for domestic papers. Another Japanese firm is erecting a great pulp mill on the banks of the Yalu, and expects to produce 15,000 tons of pulp annually.

From 1914 to June 30 this year, 281 new paper manufacturing companies, having a total capital of Y.107,647,000, were established, but as a result of the economic depression the majority of the new concerns have been dissolved. Since 1914 the older paper mills, such as the Oji and the Fuji, have enlarged their plants and increased their capital. The output by all the companies belonging to the Union during the first half of 1919 was 252,650,000-lbs., and the figures for the first half of this year increased to 285,163,000-lbs. The total output for the present year is estimated at 270,000 tons. The following table shows the output by various mills belonging to the Union during the first half of this year:—

Companies.	Lbs.
Oji ... ..	107,342
Fuji ... ..	92,492
Mitsu Bishi ... ..	28,458
Kyushu ... ..	15,037
Chuwo ... ..	15,030
Kokura ... ..	11,642

Companies.	Lbs.
Hokuyetsu ... ..	4,975
Umetsu ... ..	3,896
Kumano... ..	2,556
Nakanoshima ... ..	1,871
Yuko ... ..	1,371
Karafuto ... ..	7,493

The following table shows the exports and imports during the past six years:—

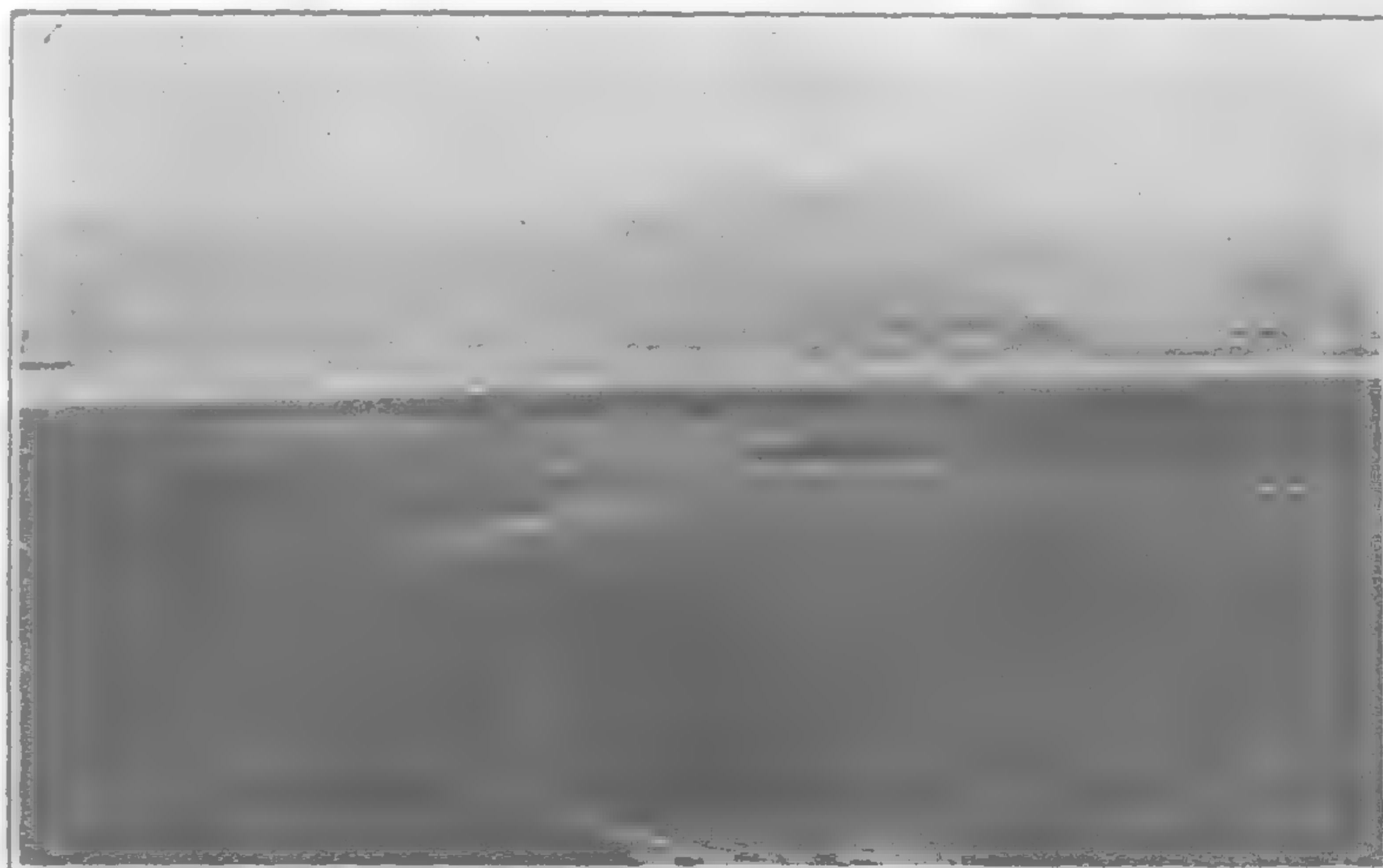
	Exports. Lbs.	Imports. Lbs.
1914 ... ..	14,406,000	53,385,000
1915 ... ..	26,937,000	26,685,000
1916 ... ..	55,427,000	35,265,000
1917 ... ..	70,699,000	16,637,000
1918 ... ..	83,156,000	34,692,000
1919 ... ..	73,003,000	56,955,000

The import of pulp to Japan from Canada represents 25 or 30 per cent. of the total imports of the annual output of about 600,000,000-lbs., 20,000,000-lbs. are used by the Government Printing Office in Tokyo, 230,000,000-lbs. are consumed by newspaper offices, 130,000,000-lbs. by magazines and other periodicals, and the balance is partially exported abroad. At present 120,000,000-lbs. have accumulated on the domestic market and manufacturers are trying to ship their stocks abroad. The exports during the first eight months of this year show a diminution as compared with the returns for the corresponding period of last year. Below are the details:

	1919. Kin. (1,322-lbs.)	1920. Kin.
Printing paper ... ..	15,424,000	12,785,000
Wrapping paper ... ..	2,283,000	2,655,000
Cigarette paper ... ..	1,508,000	1,519,000
Imitation paper ... ..	2,116,000	1,760,000
"Renchu" paper ... ..	1,196,000	226,000
"Toyo" paper ... ..	136,000	52,000

Since the beginning of April this year, no export shipments have been made of native papers, and since the beginning of September the imports have shown a considerable diminution. Some anticipate that during the first quarter or the first half of next year, no foreign paper will be imported. The following table shows the imports during the first eight months of this year and last year:—

	1919. Kin. (1,322-lbs.)	1920. Kin.
Printing Paper ... ..	16,312,000	11,153,000
Wrapping Paper ... ..	6,607,000	12,377,000
Drawing Paper ... ..	226,000	165,000
Paper for Matches ... ..	66,000	135,000
Other Paper ... ..	2,311,000	1,251,000



Harvesting wild reeds along the River Rakuto. (Used as raw material for pulp making at the Kiho plant.)



## Shanghai Dock and Engineering Co.

### Yangtze Steamer, *Kiang-An*, Successfully Launched from Pootung Ways

THE new Yangtze steamer, *Kiang-An*, one among a number of additional vessels being built for the China Merchants' Steam Navigation Company by the Shanghai Dock and Engineering Company, was successfully launched from the Pootung ways on November 27. The *Kiang-An* was christened by Mrs. T. W. Stedman, daughter of Captain Lunt, marine superintendent of the C. M. S. N. company and wife of Mr. Stedman of the United States Steel Products Company. Mr. John Prentice, chairman of the directors; and Mr. W. S. Burns, manager of the Shanghai Dock and Engineering Company, received many hearty felicitations from the representative party of guests who witnessed the launch ceremony.

The *Kiang-An* has been designed as a passenger and cargo steamer and is much the same as the *Kiang-Hsin*, built by the Dock Company some years ago for the same owners. She is fitted with special ports and cargo facilities for the rapid loading and discharging of cargo and her passenger accommodation is large and luxuriously finished. She measures 340-ft. long by 48-ft. moulded breadth and 24-ft. 6-in. moulded to upper deck and carries 2,150 tons deadweight cargo on a draught of 2-ft. 6-in. mean.

The Chinese saloon and passenger accommodation is placed on the upper deck and consists of large first-class saloons and state rooms for 28 first-class and 40 second-class passengers forward and 34 second-class and 154 third-class aft: the petty officers and crew are comfortably placed in the forecabin and the comprador's staff and other supernumeraries are placed amidships. On the deck above the upper deck is placed the European first-class accommodation, consisting of a large and luxuriously appointed saloon forward and state rooms for 12 passengers. The officers and engineers are comfortably placed amidships and the after end of the deck is occupied by a saloon and state rooms for 56 second-class passengers. The deck above the European accommodation is arranged for navigating purposes with large wheel-house and spacious rooms for the captain and pilots.

The propelling machinery of about 3,000 indicated horsepower, built in the Dock Company's workshops, consists of two independent sets of triple-expansion surface condensing engines, each fitted with the usual pumps and direct acting steam and oil reversing gear, while steam is generated in two large cylindrical multitubular boilers fitted with Howden's forced draught and designed for a working pressure of 180-lb. per sq. inch and an auxiliary boiler of the same working pressure for general service. The auxiliary machinery includes independent centrifugal circulating pumps. Weir's type feed and general service pumps and feed heater, Weir's ballast pumps, sanitary pumps, two large steam-driven dynamos for lighting and fans, steam steering gear, steam windlass, steam capstan aft and other fittings as usual in a steamer of this class.

Construction has been superintended by Captain W. H. Lunt and Mr. Gavin Wallace, the owners' superintendents. The vacated building berth will be immediately occupied for the construction of a large steel 3,000-ton cargo hulk building to the order of the Indo-China Steam Navigation Co. for service on the Yangtze, while two of the building berths alongside are presently occupied with steel twin-screw steamers much the same size as the *Kiang-An* and for the same owners.

**JAPAN'S INSURANCE BUSINESS.**—Tokyo, November 2 :— The business result of the insurance concerns for the past nine months between January and September inclusive makes a better showing as compared with the same period of last year. The total amount of new policies contracted during the nine months reached Y.35,358,151,000, this being a gain of Y.10,532,684,000 on the similar figure of last year. Classified according to different lines of insurance business the figures are tabulated as follows:

	Jan.-Sept., 1920	Jan.-Sept., 1919
(Figures in thousand yen)		
Life insurance .....	456,146	430,618
Conscripits insurance .....	42,809	30,271
Accident insurance .....	29,636	28,708
Fire insurance .....	20,763,085	12,185,740
Marine insurance .....	12,266,021	10,850,740
Forwarding insurance .....	1,765,069	1,274,151
Other .....	35,385	25,364

Thus, the figures for this year show more or less gain in all lines as compared with last year, the increase being especially noticeable in fire, marine and forwarding insurance. Again the balance of the outstanding contracts at the end of each of the nine months under review showed more or less increase of the figure of the previous month. The amount of the outstanding contracts at the end of September, compared with the similar figure for the same period of last year, was as follows:

	September 30, 1920.	September 30, 1919.
(Figures in thousand yen)		
Life insurance .....	2,445,296	1,931,024
Conscripits insurance .....	148,646	100,063
Accident insurance .....	39,073	38,349
Fire insurance .....	11,794,227	7,515,836
Marine insurance .....	2,217,383	2,181,389
Forwarding insurance .....	49,407	33,372
Other .....	57,728	34,138

## New Flotations in Japan

The Bank of Japan's returns give the total amount of capital created during September as Y.203,785,000, of which Y.132,170,000 is for the companies established and Y.71,615,000 for those extended. Classified into kinds, the figures may be mentioned as under:—

(In Thousands of Yen)				
Kind.	Number of Companies.	Capital of Companies Established.	Extended.	Total.
Banking ... ..	5	18,000	4,670	22,670
Trust and Money lending	2	5,500	0	5,500
Warehousing ... ..	0	0	0	0
Insurance ... ..	0	0	0	0
Transport ... ..	1	100	16,800	16,900
Railway and Tramway ...	0	0	16,800	16,800
Shipping ... ..	0	0	0	0
Other ... ..	1	100	0	100
Mining ... ..	6	7,100	0	7,100
Electric ... ..	4	23,550	1,980	25,530
Manufacturing ... ..	41	38,850	36,695	75,545
Gas ... ..	0	0	0	0
Spinning ... ..	1	1,000	5,000	6,000
Weaving ... ..	5	1,000	0	1,000
Chemical ... ..	4	1,900	14,000	15,900
Machinery and Tool ...	8	7,900	0	7,900
Shipbuilding and Dock ...	0	0	0	0
Ceramic ... ..	3	2,100	0	2,100
Metal ... ..	0	0	0	0
Food Stuff ... ..	10	4,700	17,000	21,700
Miscellaneous ... ..	10	20,250	695	20,945
Fishery ... ..	3	600	0	600
Agricultural ... ..	5	11,000	5,000	16,000
Commercial and Other ...	42	27,470	6,470	33,940
Total ... ..	109	132,170	71,615	203,785

As compared with August, the number of companies shows a gain of 14 and the total of capital one of Y.53,281,000, including Y.9,641,000 of established companies and Y.43,640,000 of extended companies.

As to the total for the first nine months of 1920, the figures may be mentioned as follows:—

(In Thousands of Yen)			
Kind	Jan.-Sept., 1920.	Jan.-Sept., 1919.	Jan.-Sept., 1918.
Banking ... ..	622,169	414,255	204,068
Trust, Money Lending and Warehousing ...	213,523	27,780	55,142
Insurance ... ..	40,500	36,800	57,500
Transport ... ..	492,266	265,350	196,075
Railway and Tramway	444,371	97,600	37,975
Shipping ... ..	28,350	136,000	136,000
Other ... ..	19,545	31,750	22,100
Mining ... ..	233,055	146,780	244,750
Electric ... ..	166,595	284,450	81,765
Manufacturing ... ..	1,644,990	639,861	588,868
Gas ... ..	8,450	150	270
Spinning ... ..	229,850	69,297	27,220
Weaving ... ..	214,893	117,485	65,765
Chemical ... ..	246,812	159,622	126,915
Machinery and Tool ...	164,740	62,540	120,590
Shipbuilding and Dock	3,200	21,550	22,130
Ceramic ... ..	78,625	24,900	56,538
Metal ... ..	107,100	30,030	96,240
Food Stuff and Miscel- laneous ... ..	591,320	154,287	73,200
Fishery ... ..	50,941	22,550	7,380
Agricultural ... ..	176,870	122,970	29,715
Commercial and Other	1,076,197	307,590	482,686
Total ... ..	4,717,066	2,268,386	1,947,950

As may be noted from the above table, the total for January-September, 1920 shows an increase of Y.2,448,679 and Y.1,796,116 over the same period of 1919 and 1918 respectively.



# Tokyo Subway Plans

WITH the capital partially paid in and tests as to the density of the soil, completed the Tokyo Underground Railway Company, Ltd., is going steadily forward with its plans to relieve the present congested conditions of traffic, says the *Japan Advertiser*.

The company, which received its charter on November 15, 1918, will increase the capital stock from Y.10,000,000 to Y.80,000,000.

The original issue of Y.10,000,000 has all been subscribed, and 10 per cent. paid in. Unlike most corporations in Japan, a railway is allowed to increase its capital stock when only this much is actually in the treasury.

It is estimated that the cost of constructing the first underground line will approximate Y.35,000,000. The present plan is to sell the remainder of the new increase in stock and borrow whatever amount may be necessary from foreign sources. The entire plan calls for an expenditure of at least Y.100,000,000. The present company is the result of the merger of three subway enterprises, the Tokyo Underground Railway Company having recently absorbed two smaller companies.

Ever since the plan of a subway in Tokyo was first broached there has been considerable skepticism of its practicability because of the fact that Tokyo is built on reclaimed ground.

At 61 places in the city where the lines are to be built the company has bored for a depth of 20 *shaku* (about two inches less than 20 feet) in order to determine the supporting power of the soil, which their tests show to be three to five pounds to every square foot.

Taking the boring at Tori-Itchome, Ginza, which is considered typical of the entire 61, the surface soil is found to extend downward for 14.3 *shaku*. Next comes 1.8 *shaku* of gravel and shell, beneath which is 2.4 *shaku* of greenish clay, followed by 1.5 *shaku* of yellowish clay, beneath which is struck a mixture of sand and clay extending on downward.

At this point the density of the soil is sufficient to support the construction work. While it has not been definitely decided that the subway will be built at this level, tentative plans seem to indicate that the floor of the subway would be approximately 20 feet below the surface of the ground.

Mr. T. Hayakawa, managing director of the company, says that no selection has as yet been made regarding the class of materials or the exact type of construction to be employed.

Waterproofing, says Mr. Hayakawa, will not be as essential in Tokyo as it is in London and Glasgow, giving as his reason the fact that there is no high land immediately contingent to the city which would increase the pressure of underground moisture.

The trains would be operated by electric power, and service so designed as to afford rapid transit between the central business districts of Tokyo and the outlying residence and suburban sections.

The first line to be built would start at Shinagawa, curve slightly inward to Nihombashi and again to Manseibashi, thence to Ueno, where it would fork, one branch going to Asakusa Park and the other terminating at Minami Senju. The total length of this line would be 9½ miles, or nearly one-third of the entire system contemplated. It would connect with the electric and steam interurban and express trains at each end.

Ground will be broken for its construction in August next year.

Three other lines are to be built in the future. One of them will start at Meguro, parallel the original line, crossing it at Shimbashi, connecting

with its terminus at Asakusa Park and continuing on to direct connection with Asakusa Station in Honjo-ku. A third line will start at Ikebukuro, curve through the centre of Tokyo to Nihombashi, where it will cross the original line, and continue on to Yettushima in Fukagawa-ku. The fourth line will start at Sugamo and swing into the original line at Ueno. The total mileage of the four lines will be 30 miles.

In setting forth their plans, the company's officials point out that it is essential to relieve the congested living quarters of Tokyo as well as the traffic. While Tokyo has about the same density of population as Berlin and Paris per square mile, this is called a deceptive comparison, since the greater part of Tokyo is built on the ground, whereas the European cities have higher buildings, thus affording more living space to the individual for the same area of ground space.

In addition to the need of bringing the heart of the city closer to the homes of its people, the company's officials say that the present means of transportation are sadly inadequate.

When this problem reached serious proportions a number of years ago, the men now associated in the subway proposition sought a solution. The two methods open to them were overhead or underground rapid transit systems. The overhead system they discounted, saying that it was too noisy, darkened the streets through which it would operate, seriously impaired the beauty of the city and was incompatible with Japanese clothing and living conditions. The only other alternative, say, was the subway, which decision has resulted in the launching of the present plans.

If the plans of the company mature as expected by those interested, they will give to Tokyo the first underground railway to be constructed in the Orient. Due to this fact, there are practically no engineers in Japan experienced in this line of work, and Mr. Hayakawa says that it is more than probable the company will call on engineers from America or Europe to advise with them and probably to superintend the actual construction.

At present the company is making plans for the disposal of the new stock issue authorized this week by the board of directors. Offices are maintained on the fifth floor of the Kaijo Building.

Baron K. Furuichi is president of the company, and Mr. T. Hayakawa managing director. The six other directors are: Mr. K. Nedzu, Mr. H. Ohkawa, Mr. S. Hoshino, Mr. G. Matsukata, Mr. R. Ikeda, Mr. G. Masuda, Mr. J. Urabe and Mr. S. Sakakida. In addition there are two advisers—Baron G. Sakatani and Mr. R. Nomura.

## Rough Outline of Proposed Underground Tramway System of Tokyo.



**JAPAN'S NEW DEFENSES**—As part of the scheme of completing the national defense, the military authorities are contemplating the re-arrangement of the existing system of fortifications. According to the *Asahi*, the fall of Russia as a militarist country, together with recent developments in the Far Eastern political situation, has put out of use some of the forts, such as those on Tsushima and Izugahara, where military garrisons are stationed at present. Besides the fortification of the Bonins, which was announced some weeks ago, the military authorities have decided to construct forts on Emi and Oshima in the Loochoo Islands, and in the Yujima and Okinawa Islands. A branch of the fortification bureau of the war ministry has already been established on these islands. Fortification of Formosa and Bokoto will also be undertaken shortly.



# Commercial Aeronautics in China

By HERBERT CHATLEY, D.Sc. (Eng.) Lon., M. Inst. C.E. (Ire.), A.F.R.Ae.S.

Huangpu Conservancy Board

Address made to the Engineering Society of China, November 16, 1920

**I**N the Shanghai Harbor Investigation with which the writer has had the honor to be associated, the future function of aircraft in transportation, was early envisaged. The 1918 Report contains the following paragraph:—

"What part aircraft will play in the future passenger and mail service is a question to which we do not presume to be able to give an adequate answer. Instinctively we have been inclined to look upon aeronautics as sport, as something which, it is true, can be of great use for scouting, etc., in war, but which will never be of any importance for traffic during normal conditions. Such a view does no justice to the rapid development which has already taken place. While 8 years ago, airships were fragile things, scarcely able to carry themselves and their pilot, they are now manufactured to carry a crew of 30 to 40 men and are able to mount guns. The engine power has been increased from 8 and 10 h.p. to several thousands, and the speed has been multiplied many times over. The risk of capsizing has been minimised to such a degree that the pilot can leave the helm uncontrolled for long intervals. In this respect the airship is already superior to the motorcar, which every second is dependent upon the vigilance of the chauffeur. The problem of ascending from and descending upon water has been solved. The length of the journey an aeroplane can perform has grown to such an extent that an attempt to fly across the Atlantic draws nigh. Last, but not least, the proportionate decrease of accidents has had the result of strengthening faith in the safety of aerial travelling. While in 1910 the number of ascents may have been a few per day, they are now counted in thousands.

"This progress in 8 years opens up such great prospects of future development that it seems as though aircraft has every possibility of being a great factor in future passenger and mail service. It appears only a matter of time for aircraft to be used to a great extent for such traffic as requires the most direct route and shortest possible time. In the first place the influence of aircraft is to be expected in express traffic between great commercial and national centres so situated in respect to each other that sea-going vessels are the only alternative for communication."

From as far back as 1900 the writer has been keenly interested in the development of aircraft and since 1907 has been guilty of two text books, numerous papers and many technical articles in journals on the subject. It has occurred to him that at the present moment when local developments appear imminent, the Society would perhaps be interested in having some notions as to the general economic problem of aerial transportation.

It is not proposed to deal with the use of dirigible balloons since the construction and manipulation of the large rigid types which alone appear suitable for commercial purposes will for many years be beyond the technical resources\* of this country.

\* Maintenance is especially troublesome.

It may, however, be remarked that for long voyages and considerable loads, dirigibles possess many great advantages including lower costs per ton-mile, but the financial risk is very much greater than with aeroplanes.

The aeroplane alone appears to be the immediate possibility and, as is well-known, there are now actually enough machines in the country to do something in the way of experimental transportation.

## The Economic Problem

The following are the main principles which concern us from an economic standpoint:

- (1) The horizontal resistance of an aeroplane is not less than one-eighth the total weight.
- (2) The disposable load which can be carried including fuel and pilot can scarcely exceed one-half the total weight.†
- (3) The consumption of motor spirit is of the order of one-half a pound per indicated horse-power hour or say three-quarters of a pound per thrust horse-power hour.
- (4) The smallest practical machine weighs about 500-lbs. light.
- (5) Ample provision must be made for depreciation, salaries, accident insurance and bad weather.
- (6) Very complete ground service is required.

The first three, which although only approximately true, represent good conditions, enable some simple calculations to be made.

Thus, if a machine weighs 2,000-lbs. inclusive total, the thrust is at least 250-lbs. If the velocity is 90 miles per hour=132-ft. per sec., the thrust horsepower is:

$$\frac{250 \times 132}{550} = 60 \text{ (say 90 I. H. P.)}$$

The fuel consumption will be 45-lbs. per hour, so that for a three hour flight (270 miles through air), 135-lbs. of fuel (say 20 American gallons), must be carried.† Adding say 10 per cent. for oil and other stores, makes a total of 150-lbs. If the pilot weighs 150-lbs., out of the 1,000-lbs. which represents the maximum disposable load

† Major F. M. Green (Proc. R.A.S., January 1918), gives the following useful proportions for a fully loaded machine:—

Wing structure...	...	...	13%	}	32%
Body complete...	...	...	13%		
Control gear ... (tailplane, elevator, rudder and fin)	...	...	2%		
Landing gear ...	...	...	4%	}	33% to 53%
Fuel tanks and motor	...	...	...		
According to length of trip, etc.	...	...	...		
Leaving useful load ...	...	...	...		35% to 15%
					100%

† This figure of 13.5 miles per gallon of course compares with that for an automobile, but the overhead expenses are very much greater, and the loads which can be carried are very much smaller. The comparison is, however, noteworthy and shows that in years to come aircraft may be as popular as automobiles.



Dr. HERBERT CHATLEY

Author and Scientist. Associate Fellow, Royal Aeronautical Society of Great Britain; author of "Problems of Flight" and "Principles and Design of Aeroplanes" Doctor of Science (Engineering). London University. In 1909-10, Dr. Chatley experimented with full-sized gliders and an aeroplane at Tongshan and Tientsin. He is an exceptionally high authority on the adaptability of aircraft to use in China.



only 700-lbs. remains. This trip will cost upwards of Mex. \$20.00 for fuel alone.\* As it corresponds (neglecting wind), to about 80 long ton-miles, the cost is about \$0.25 per ton-mile for fuel alone and disregarding all other expenses. As will be seen later \$1.00 to \$2.00 per ton-mile is about the absolute minimum value. Compare this with \$0.005 to \$0.01 per ton-mile for rail transport and even smaller figures for ocean transport and it will readily be apparent that an aeroplane is not suitable for carrying road-metal. The Chinese Post Office will transport one ounce of first class mail from Shanghai to Peking (say 700 miles) for \$0.03. This is a rate of about \$1.50 per ton-mile, which shows that if full loads can be commanded, first class mail *might* just come within the possibilities of aeroplane transport.

The question will, however, be asked "Cannot the cost be reduced?" To some extent it can but not much. High speeds make little difference to the fuel consumption per mile, but they reduce the overhead and render wind less important. Large machines, if full cargoes can be had, reduce the ratio of the weight of the pilot and other constant items to the weight of cargo. Small machines give somewhat reduced capital charges, and are more likely to secure full loads but cannot reduce the tariff appreciably.

Let us now consider the other expenses. The cost of a machine may be put very roughly at £1 per lb. of net weight or say, including freight, packing, commissions, etc., \$10 per lb. Depreciation and replacements are very considerable. The life of a machine has been put as low as 100 to 400 hours of flight, but even at an optimistic figure of 1,000 hours only about 330 three-hour flights can be made. If we say just for discussion that a machine only makes one flight a day, this means about one year's duration, i.e., depreciation per annum is at least 100 per cent. (Of course, in actual fact by replacing parts, the machine as a whole will last longer, but even so the body and wings must also be changed after some such time). Spare parts and small repairs perhaps add 10 per cent. to this, so that the capital cost per flight for a 1,000-lb. (net) machine is at least \$100.

(Using the same figures as before—700-lbs. carried 270 miles, this is, say, \$1.20 per ton-mile.)

The pilot making one flight a day, 25 days a month, and receiving say \$750 per month including salary, travelling expenses, life insurance, etc., costs \$30 per trip or say \$0.35 per ton-mile. The use of Chinese pilots would considerably reduce this, but might raise the depreciation figure to an extent which would neutralize that economy.

Thus we have a total of \$1.80 (say \$2.00) per ton-mile for air expenses alone. On top of this are ground costs. These include expenses in connection with:—

- Terminal aerodromes including workshops.
- Ground transport to and from same.
- Emergency landing stations.
- Lighting and signalling arrangements.
- Reserve of machines, parts and fuel.
- Offices.

All these have to be staffed, run and maintained. Their effect on the cost per trip depends on the magnitude of the undertaking.

As a very rough example, let us suppose a 540-mile route service, undertaking to make a through flight in two stages each way per day. It would be possible to do this temporarily with two machines, but in practice six would not prove too many, each of four making one three-hour flight per day and two being in reserve. Four pilots would be necessary as, in civilian flying especially in China's climate, three hours per pilot per day, would be a fair limit.

Each of the three stage-terminal aerodromes (one at half way), should be at least 100 *mow* in area (preferable circular)† raised and levelled, with at least three hangars, a workshop, pilots' shelter, and guardhouse. To keep out the burglarious or inquisitive, it will also need to be fenced. A chauffeur and motor car are required together with mechanics, riggers, signalmen, watchmen and a superintendent at each aerodrome.

Emergency landing places must be provided every 20 miles, should be at least 60 *mow* in area, and require a watchman and

ground signalman. A telephone line along the whole route is almost a necessity, and wireless sets very desirable.

The annual expenses of such an establishment can be very roughly put as follows, assuming 10 per cent. profit on the capital: *Capital charges (per annum).*

Six aeroplanes at \$10,000, 10 per cent. profit equals...	6,000
Three aerodromes at \$50,000, 10 per cent. profit equals (Including all equipment)	15,000
Twenty-four emergency landings at \$10,000, 10 per cent. profit equals ... ..	24,000
<i>Running Expenses (per annum).</i>	
Depreciation on six aeroplanes ... ..	60,000
Spare parts, repairs, etc.... ..	10,000
Fuel and oil for 1,200-3 hour trips at \$20 ... .. (equals 1 double journey per day for 300 days).	24,000
Salaries for four pilots including all allowances at \$10,000 per annum ... ..	40,000
Ground staff ... ..	100,000
Advertising; office rents... ..	81,000
Total (per annum) ...	\$350,000

(Capital required, about \$500,000.)

The hours of flight assumed are 3,600 or 324,000 miles flown (assuming over-ground speed of 90 miles per hour), or with full loads of 700-lbs., say 100,000 ton-miles.

Thus with full loads, the cost per ton-mile can easily be as high as \$3.50. It has recently been quoted at home as 10s. 6d., and again as 14s. 6d. which is much the same.

With more and larger machines it may be just possible to reduce the figure to perhaps \$1.50 per ton-mile, but all this presumes full loads. With half loads, figures of \$7.00 per ton-mile are possible.

The cost per through trip (540 miles), according to the above figures, is about \$600. Four passengers could be taken instead of 700-lbs. of cargo, and would have to pay \$150 each per trip if full loads were carried, or more if the complement were not usually made up.

## Wind and Other Weather Conditions

In the above discussion no account has been taken of wind. In actual fact winds of some 15 miles per hour or so must almost always be reckoned on and occasionally much higher winds will occur. When running both ways, there is a certain amount of compensation as far as consumption of fuel is concerned, but since sufficient spare fuel must be carried to make the trip under the most adverse conditions, probably this does not help the carrying capacity.

By running at higher speed, the importance of wind drift can be minimised, but in any case it will be important. Zikawei observatory is ready to provide weather advice for aeronautical purposes and such predictions will be of the greatest possible importance for the economy, reliability and safety of an aero service.

Typhoons are so rare in North China as to make little difference to a service beyond occasionally stopping it for perhaps one day, but in South China they might be more of a hindrance.

Fog in the Central and Southern Valleys is a very serious factor and would considerably disturb a coastal service.

Rain and thunderstorms would give some trouble, but are not insuperable difficulties.

First class meteorological observations and rapid transmission of predictions are essential.

## Topographical Conditions

Except on the flat sea-shores near Tientsin, parts of the Gobi desert, and a few other special localities, China is by no means well provided with natural landing places. In South and Central China, every level area is cultivated either for rice or dry crops. The dry crops are generally on uneven ground cut up with creeks, and the rice fields, with their irrigation ditches and wet crops, are obviously bad landing places. In North China the plains are intensely

\* Specially purified spirit at \$1.00 per American gallon is assumed.

† For the Cape to Cairo flight 800 yards aerodromes were prescribed which are about 600 *mow* in area.



cultivated with high growing crops and in the winter are left furrowed.

There are no grazing fields like those of Europe. Speaking generally, the writer is of opinion that all emergency landings in China must be specially prepared.

In the mountainous regions of West and South China, where there are as yet no railways or roads, *provided that there is sufficient demand for rapid transit, or the same can be stimulated*, aerial service would be of great use, but the disturbed condition of the air over such areas and the difficulty of establishing, maintaining and finding emergency landing places is a serious drawback. An air route from Ichang to Chengtu has been suggested. Practical difficulties of staffing and maintaining an efficient ground service would certainly arise on this or any other route remote from westernized centres. In the arid rough regions of N.W. China, atmospheric difficulties would occur, but emergency landing places could probably be found. A difficulty with regard to the transport of fuel and stores to the intermediate and western aerodromes must be anticipated. The transport of a damaged machine from an emergency landing station, or the provision of facilities for local repairs, would perhaps be very serious matters.

### Practical Conclusions

Without wishing to dogmatise, the writer suggests the following conclusions:—

- (1) A purely mail service would necessitate a heavy franking of mails, which would exclude much of the native mail and might easily fail to be in sufficient demand. Thus, it is very doubtful whether there is sufficient volume of first class mail from Peking to Shanghai, to maintain a service even if it were all franked say 10 cents per letter. The service would only save about 24 hours time.
- (2) A passenger service is conceivable for commercial and political purposes, but might fail to secure a sufficient number of paying passengers. The government might find it advantageous to maintain such a service, even if it did not pay directly, for political reasons.
- (3) A cargo service can only be operated when carrying very valuable goods. Thus, if we assume a rate of \$5.00 per ton-mile, equalling 0.22 cents per lb. mile, it will cost \$1.00 to transport 1-lb. 450 miles. If we say that 250 miles is the smallest distance in question, and that transport should not cost more than 25 per cent. of the cost at the place of origin, the value of the stuff so sent should not be less than \$2.40 per lb. It seems doubtful if full cargoes of such valuable material can be secured.
- (4) In view of the necessity for full cargoes of high class mail, valuable cargo or a full complement of wealthy or important and energetic passengers, it is probable that aerial services can only be a success when plying between two very highly developed centres.
- (5) Aeroplanes already begin to compare with automobiles for long distance transport.

What are the prospects for future improvement of the adverse factors? The following possibilities enter into the question:—

- (1) *The reduction of head resistance.*—It is not probable that under the best conceivable conditions, that the resistance would be less than 10 per cent. of the total weight. This would make 20 per cent. reduction in the fuel consumption.
- (2) *Reduction in the consumption of fuel.*—The actual chemical energy in hydrocarbon fuels amounts to about 5 h.p. hours per lb. but thermodynamic considerations make it impossible to get much more than 40 per cent. of this, which value has now been reached. No great decrease of consumption is here possible.
- (3) *Reduction in the price of fuel.*—In view of the approaching shortage of mineral oil, this reduction does not seem very probable, and will not help very much, anyway, as fuel consumption is only a small part of the expense. The substitution of alcohol or kerosene for gasoline would save perhaps 10 per cent. of the running costs.
- (4) *Reduction in the capital cost of machines.*—In view of labor problems this seems very doubtful, but mass production would help.
- (5) *Reduction in pilots' salaries.*—The development of good

Chinese pilots may help a little.

- (6) *Reduction in ground expenses.*—This is the most probable of all. If a ground service can be arranged to serve a large number of machines, its cost per flight can be largely reduced, but this presupposes a large demand so that there is here a "vicious circle."
- (7) *Reduced landing speeds.*—There has been much talk of a new wing design which would enable small machines to be flown. The writer presumes that by modifying the angle or the area (or by some equivalent device), it has been found possible to change the speed so that lower landing and rising speeds can be obtained. This may help by reducing the necessary size of aerodromes and landing places and perhaps reduce head resistance when flying, but otherwise cannot mechanically make much difference.
- (8) *Reduced depreciation.*—The use of superior forms and materials may enable considerable reductions to be made in regard to the depreciative item. The all-metal machine is highly thought of, but is difficult to repair.

In conclusion, the writer hopes that a real effort will be made in China to use aeroplanes regularly, whether it be for military practice, sport or perhaps commercially, since the commercial advantages which undoubtedly exist under certain conditions, can only be found by experience. In Shanghai for coast and river flights there seems a fairly good prospect for seaplanes.

## The Peace and Asia

By Sidney Coryn

(From the "San Francisco Argonaut," September 18, 1920)

IT may be we are all tired of the peace conference. Indeed there is no element of doubt in the matter. We are not only tired of it; we are sick of it, disgusted with it, nauseated with it. But we cannot get rid of it. We must carry it on our backs like the old man of the sea. It is the dominant issue in the presidential campaign. It lies like a pestilence upon the face of the world. Its shadow, prophetic of mischief, has been cast prophetically across the future pages of history. And we shall be fortunate if we are not making a similar plaint fifty years hence.

In the innocence of our hearts we supposed that we now knew all about the conference, that we had lifted the curtain, peered into the dark corners, searched the closets. It may be that we have not even begun to do any of these things. At least we have done them only in a preliminary and perfunctory way. Dr. Dillon helped us, perhaps, more than any other writer, but then Dr. Dillon, able and honest and abundantly informed as he is, was naturally writing from the British point of view and mainly for a British audience. Until now we have had nothing comparable with his work from the standpoint of the American observer. There were American reporters, rather too many of them, but with few exceptions they were just reporters and nothing more. They did not interpret. They had no background of familiarity with European politics from which to work. And sometimes they were emotionally partisan.

But now comes Mr. Patrick Gallagher of the New York *Herald* with one of the three or four worth-while books about the doings at Versailles. He calls it "America's Aims and Asia's Aspirations." He is directed particularly to the Asiatic results of the conference and to the Asiatic attitude that has been induced by the conference. Mr. Gallagher may be said to have Asiatic sympathies—more power to him. He wants to tell the world how Asia was treated and what Asia may possibly do as a result. But Mr. Gallagher takes no narrow view. If he thinks sectionally, so to speak, he does not forget that his topic is part of the whole. Whatever was done at the conference was done by a few men, and it was the outcome of a general situation and of the play and interplay of apparently irrelevant forces. And so Mr. Gallagher describes for us the conference as a whole, the tangle and conflict of interests that pervaded it, the jugglery of the policies that confused the issue, and the personal peculiarities of some of the chief actors that played so large a part in the conclusions. And perhaps it may be said that his book has another value. Mr. Gallagher is an admirer of President Wilson and he says for him everything that an honest ingenuity can say. Here we have, not the special plea, but the just plea. It is the best



that a hearty admiration can make. There was once a man, says Mr. Gallagher, who amassed so much power that he announced his partnership with God, but he did not consult God about this. So God raised up one who looked like Michael in order that the usurper might be humbled, but Michael, too, became drunk with power, so God took away the power from him, that all men might know themselves as clay and Him *only* as God. Emperor and President!

It is with the composition of the American delegation that Mr. Gallagher first finds fault. It was actually from this that our "woes unnumbered" sprung. What did these men know about Pacific problems? What could they know? Not one among them had a grain of western information or opinion. With the exception of General Bliss, whose duties were military, "their entire knowledge of the fundamental facts of Far Eastern problems could have been compressed into a very small pill-box. Messrs. Wilson, Lansing, and House did not know even the rudiments of the issues." Mr. Gallagher returns to this point again and again. The American delegates were outmatched at every point, outmatched in skill, in intelligence, and in knowledge. The President had deliberately surrounded himself with nonentities on the principle that "among the blind the one-eyed man is king." And now he had to pay the penalty. His hand contained no trumps, no picture cards to play against the strong hands of his adversaries. It was all so pitiful, so unnecessary. "How much better it would have been to have taken counsel of Lodge, of Knox, or Roosevelt! They, at least, were Americans. They might have understood. What a pity it was he permitted himself to go to Paris at all! . . . It was courting disaster to leave the American end of the peace during the most vital month of all in the feeble hands of Lansing and the hollow head of House." England and France, says Mr. Gallagher, mobilized their brains. Mr. Balfour was England's ace, and her pack was full of face cards. We had "one ace and four deuces." It might have been otherwise "if only Mr. Wilson had not been obsessed by the delusion that he carried in his own head all the wisdom of America. There was work in Paris for Mr. Root, Mr. Taft, Dr. David Jayne Hill, and Mr. Lodge. Mr. Wilson did not realize that fact, and that settled it, him, and us."

Mr. Gallagher is of Irish blood and he naturally emphasizes the relation of Ireland to the conference. He says truly that all peoples have the right of revolution against tyranny, but the attitude of other governments toward such a revolution must be closely safeguarded. Mr. Wilson, he says, has beamed upon some revolutions and frowned upon others. There were two courses open to us as a government in approaching the Irish question at Versailles. If Mr. Wilson wished to sustain the Irish rebels it was his duty to notify the British to that effect before going to Paris. Did he do this? Of course he did not. Tricks, says Mr. Gallagher, are inadmissible. "To run with the hare and to hunt with the hounds is repugnant to American as well as to British nature. Why, then, did Mr. Wilson attempt to run with the Sinn Fein hare and to hunt with the British hounds? That was what he did, both personally and through the nimble assistance of Colonel House. He sought to play with Mr. O'Kelly and with Mr. Walsh on the one hand, and with Mr. Lloyd George and Mr. Balfour on the other . . . I had numerous talks with Messrs. O'Kelly, Walsh, and the other Irish spokesmen, as well as with British officials, and I must confess that both the Irish and the English are amply justified in charging Mr. Wilson with having acted in bad faith and in exceedingly bad taste . . . The English at no time attempted to walk upstairs and downstairs at one and the same moment. They left such feats, impossible of performance, to Mr. Wilson." And yet Mr. Gallagher is an enthusiastic admirer of President Wilson. He looks upon him as a sort of Prometheus, a Titan, chained to the rocks. And he is placing upon his actions the best interpretation that those actions will permit. But the President's political gymnastics brought their own reward. Lloyd George was quick to see the advantage of allowing Mr. Wilson to meddle with British domestic affairs. For having meddled in one direction to England's detriment it was easy to persuade him, indeed to force him, to meddle in other directions to England's advantage. This, indeed, is actually what happened, and in more than one instance.

The story of the transfer of power from the conference as a whole to the Big Four has never before been told, but it has been told now by Mr. Gallagher. When Mr. Wilson returned to America during the course of the conference he was fully resolved that the league of nations should form a part of the peace treaty. He had paid a high price for his triumph. He had dropped the Freedom of

the Seas and he had surrendered to Mr. Hughes of Australia on the subject of racial equality for the Japanese. What was his anger when he returned to Paris to find that the precious league had been put in a drawer at the instigation of Mr. Balfour and that Mr. Lansing had actually delivered a speech in Paris in support of an "immediate peace," that is to say, peace without the league. At once there was an explosion. No one knows quite what went on in the President's room at the Hotel Crillon. The great men came and went, but there were no sounds of the conflagration that was certainly raging. But the President had his way, or thought he had, although as usual he had to pay a far heavier price for his triumph than it was worth. Lloyd George and Balfour knew well that Mr. Wilson could have his way in all things so long as he was able to appeal for the votes of the small nationalities who had been mesmerized by "self-determination," and all the other contents of the idealist's trick bag. At once Lloyd George began to harp on the idea of "getting along" with a few men "who could talk and understand English." Mr. Wilson walked straight into the net. He seems even to have believed that the proposal came from him, but, says Mr. Gallagher, "Mr. Wilson committed *hara-kiri*—when he created the Council of Four . . . He did what M. Clemenceau and Mr. Balfour wanted him to do." Mr. Wilson was now confronted with three men who knew precisely what they wanted and who were utterly unmoved by the claptrap of the Wilsonian idealism. No eloquence on earth could move them by a hair's breadth. Emotionalism formed no part of their stock in trade.

We have often been told that the Monroe Doctrine is fully protected by the present terms of the league of nations. As a matter of fact it is in no way protected. Once more we find Mr. Wilson outwitted and outmaneuvered. It will be remembered that an overwhelming public opinion compelled the insertion of a Monroe Doctrine clause, although Mr. Wilson himself saw no reason for such a safeguard in a world that would henceforth be ruled by the amities and the concords, for had he not so ordained it? Now it seems that when Mr. Wilson returned to Paris he confided the difficulty to Lord Robert Cecil, who immediately "posed his patrician personality in an attitude of deep sympathy." Lord Robert said that he personally would at once attend to the matter, and therewith he drafted the following clause: "Nothing in this covenant shall be deemed to affect the validity of international engagements such as treaties of arbitration or regional understandings like the Monroe Doctrine for securing maintenance of peace." Now to the casual eye that appears to be quite satisfactory. But is it? Does it protect the Monroe Doctrine? Not in the least. The clause has no meaning whatever so far as the Monroe Doctrine is concerned. The Monroe Doctrine was intended to prevent the extension of European absolutist principles to South America and to forbid the interference of Europe in American affairs. In other words it regulates the relations of Europe and America. But the league is a world organization in which America herself was to participate. An interference in American affairs by the league would not be an interference by Europe, and it is only against interferences by Europe that the Monroe Doctrine operates. In other words, the supposedly protective clause is a "scrap of paper," and it would be so treated in the event of its invocation. And so we may thank Mr. Gallagher for telling us that Lord Curzon wrote the Monroe Doctrine clause, that Lord Robert Cecil trimmed it, that Mr. Balfour inserted an important word, and that Mr. Wilson O.K'd it.

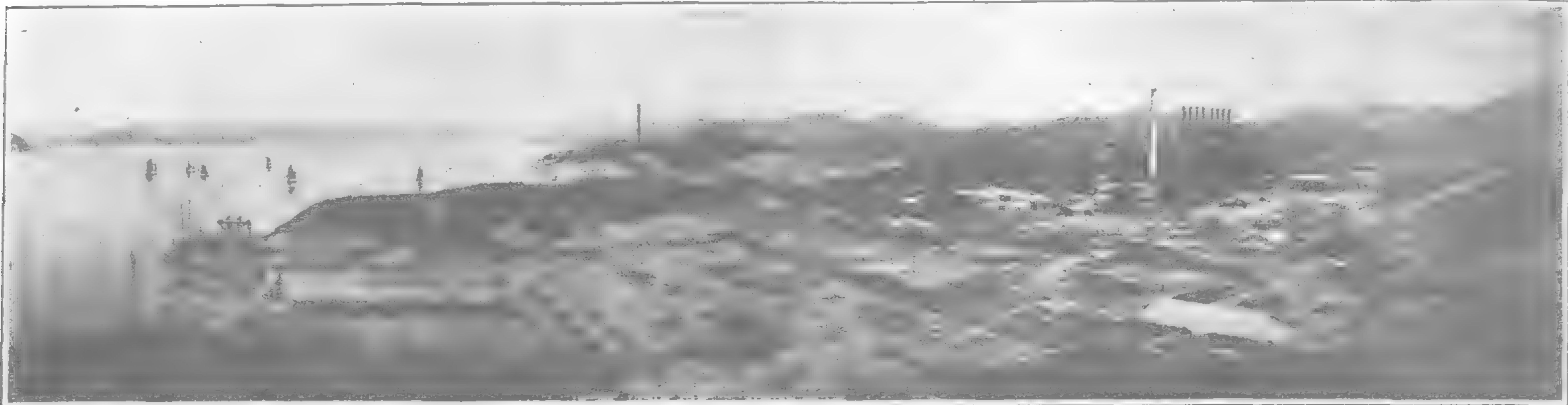
It is not possible here to do more than skim a little of the cream from Mr. Gallagher's book, which is published by the Century Company. It is one of the really important books of the day.

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JAPAN'S TRADE WITH AMERICA.—Mr. H. Kanzaki, the Chief of the Investigation Section of the Mitsui Bank, regards, with pessimism, the future prospects of Japan's trade with the United States. An increase of the American import tariff, will, he thinks, have a serious effect on Japan's trade with America, which absorbs 30 or 40 per cent. of the Japanese exports. The present inactivity of Japan's raw silk trade in America is due to the over-supply in America amounting to 60,000 bales. Mr. Harding's economic policy will also probably affect America's trade with China, and it is feared Japan may be placed in a very difficult position. The importation of American goods into Japan will be facilitated by a protective policy, and comparatively cheap American goods will find their way into Japan. America's attempts to prevent the importation of foreign goods will form a very serious question for Japan. Raw silk being now a necessity for the American, however, they may wish to have it cheap, but this does not justify optimism.



FAR EASTERN IRON AND STEEL



Iron Foundry of the Mitsubishi Company, Kenjiho, Korea

THE DEVELOPMENT OF JAPAN'S STEEL INDUSTRY.—The following figures show the production of iron and steel in Japan and her requirements for a number of years past :—

Year.	Production of Pig Iron.	Production of Steel.
	Metric Tons	Metric Tons
1892.....	17,283	1,135
1903.....	30,623	39,788
1906.....	145,453	69,375
1912.....	239,168	195,636
1913.....	242,676	219,714
1914.....	301,726	254,952
1915.....	320,627	282,516
1916.....	391,892	342,870
1917.....	501,402	384,025
1918.....	606,428	539,614
1919.....	672,861	601,539
Year.	Demand for Pig Iron.	Demand for Steel.
	Metric Tons	Metric Tons
1916.....	627,905	773,943
1917.....	694,552	1,134,916
1918.....	873,023	1,129,410
1919.....	1,023,118	1,321,363

From the present status of the Japanese iron industry it may be concluded that the national output of steel in 1924 will be only 1,280,000 tons, and as the year's requirement are estimated at 2,220,000 tons, the output will meet six months' demand in time of peace and four months' demand in time of war.

Foreign trade has always been against Japan, due mainly to the enormous importation of iron and steel. The present Government Yawata Iron Works were established in 1894 with the hope of producing 90,000 tons as against the existing demand of 170,000 or 180,000 tons. The establishment was able to supply the full amount in 1905 or 1906, but in the meantime, the demand had doubled that of 1894, which necessitated an expansion of the works. When the present extension program is completed, the works will be in a position to produce 750,000 tons. The war also stimulated the expansion of the private iron industry. Still the demand is only half met by domestic producers. No other countries except America and Germany equal Japan in the growth of demand, a striking development of her national strength.

For the period from 1905 to 1918, the importation of iron and steel aggregated Y.1,636,950,000 in value, or 70 per cent. of the value of raw silk exported for the same interval. For the same period, the proportion of imported iron and steel to the whole import trade of the country rose steadily, while that of exported raw silk to the whole export trade decreased, until in 1918, when the value of iron and steel imported exceeded that of raw silk exported to the extent of Y.25,000,000. If the importation of iron and steel continues to grow at this rate, it is feared that our foreign trade will show a more and more unfavorable balance. This is a serious economic question.

Japan has been able to increase her production of pig iron from a very insignificant amount to 700,000 tons for the past 50 years. Still the average consumption of pig iron per capita for the three years ending 1911 was only 22 kilograms as against 296 kilograms in America, 148 kilograms in Germany, and 140 kilograms in England. From this we may conclude that the Japanese demand will grow hereafter in proportion to her national development.

Japan has never protected her iron industry as America and Germany have done, her existing import tariff having been fixed over ten years ago, when the price of iron was much lower than now. Under the circumstances, it is but natural that her industry has not developed so rapidly as in foreign countries. In the writer's opinion, the industry should be given due pro-

tection by the state, while the iron manufacturers themselves should be encouraged to combine for economy's sake.

The following table shows the number of iron works in Japan, under the factory law based on an investigation made in October, 1919 :—

Kind of Works.	Number.
Pig Iron Works .....	45
Steel Works .....	21
Both .....	8
Total .....	45

In addition, there are 242 smaller factories in existence.

A combination of interests is most important for the development of the industry, and particularly necessary for Japan in order to establish a proper supply of ore. Japan is not adequately supplied with iron ores and coal, her needs being supplied by China and Korea to the amount of 70 per cent., as may be seen from the following table :—

(In Thousands of Tons)

Year	Production	Importation	Demand
1916.....	139	470	607
1917.....	229	417	649
1918.....	359	598	958
1919.....	390	958	1,348

In Japan, iron mines are worked exclusively for the owners' own supply and are not available for outsiders. The Kamaishi Mine, for instance, which is estimated to hold a deposit of 30,000,000 tons of iron ore is producing only 100,000 or 150,000 tons a year for the Tanaka Iron Works, the owner. The deposit of iron ores in Japan is placed at 100,000,000 tons, that in Korea at 150,000,000 tons and that in South Manchuria at 160,000,000 tons. These iron mines can be operated more profitably under a combination. But unless the Government Yawata Iron Works are included, such a combination would be meaningless. For the above works account for one-half of the national output of iron and steel at the cheapest prices obtainable in the country.

Another most important question is the raising of the import tariff, in order to protect the domestic industry. The present Japanese *ad-val.* duty is 5.6 per cent. on pig iron and 14.3 per cent. on steel plates. The average rates on steel plates in Italy, Sweden and Austria-Hungary, whose capacity of iron production nearly equals that of Japan, is 39 per cent. This is much higher than the Japanese rate, which might therefore be increased to 25 per cent. But with the higher prices of iron and steel, and the prospects of a lower cost of production under a combination it would be more reasonable to raise the rate to 10 per cent. for pig iron and to 15-20 per cent. for steel plates. Japan used to impose an import duty of 30 per cent. on steel plates, but it was reduced to 15 per cent. in 1911. The rate was then converted into a specific duty of Y.10 per ton based on the prevailing price, but this was a great mistake. The specific duty must be changed into an *ad-val.* duty, and there must be a different rate according to quality.

Some people oppose tariff protection on the ground that it will force the consumers to pay more, and they prefer a subsidy. But the subsidizing of the iron industry will be financially very hard. If a subsidy of Y.20 per ton were given for the production of 2,000,000 tons in the country, the total disbursement would reach Y.40,000,000. There is a system of state aid already in operation, but it is extended only to iron works capable of producing upwards of 5,250 tons a year.

The following table shows the principal iron works in Japan at the end of 1919, each of which has a capital of more than Y.3,000,000

(In Thousands of Yen)

Name	Capital Total	Latest Paid-up	Dividend. Per cent.
Osaka Iron Works .....	5,300	5,300	Loss
Oriental Iron Works.....	40,000	30,000	5
Japan Steel Tube Works .....	21,000	21,000	10
Kiao Iron Works .....	18,000	4,500	8.6
Japan Steel Works .....	30,000	30,000	10
Tokyo Steel Works .....	3,000	3,000	Loss



(In Thousands of Yen)			
Name	Capital Total	Latest Paid-up	Dividend. Per cent.
Fuji Steel Works.....	6,000	6,000	Loss
Tokai Steel Works .....	3,000	2,250	8
Japan Steel Works .....	5,000	4,000	Loss
Oshima Steel Works .....	7,000	4,900	5
Kokura Steel Works.....	15,000	6,000	0
Kobe Steel Works.....	10,000	6,250	20
Sumita Iron Works .....	3,000	1,500	Loss
Nagasaki Iron Works .....	5,000	1,250	5
Mitsubishi Iron Works .....	5,500	5,500	Loss
Kyushu Steel Works .....	10,000	5,000	0
Japan Iron Works .....	3,000	2,246	0
Electrolytic Iron Works .....	3,000	1,500	4.5
Sumitomo Steel Works .....	6,000	6,000	5
Kishimoto Iron Works.....	3,000	3,000	Loss
Tanaka Iron Works .....	16,580	16,580	0

(Dr. K. Imaizumi in the *Hochi*).

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**STEEL PLANT AT CHINWANGTAO.**—The Kailan Mining Company are planning to establish a steel plant at Chinwangtao. They have applied to the Peking government for exemption of *likin* and export duties on products from the plant.

The Peking correspondent of the *China Press* says (November 13): The Pao Shih Mining Company of Anhui and the Kailan Mining Administration have jointly established a steel refinery factory at Chinwangtao, the former contributing its iron ores, the latter its coal. Work has already begun on the installation of a fire furnace and Director Liu has filed an application for registration with the Ministry of Commerce and Agriculture, also requesting the latter board to take up with the Ministry of Finance the question of giving the factory the privilege of remission of *likin* and other import and export duties for ten years.

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**IRON MARKET IN JAPAN.**—The tone of the Japanese iron market has improved slightly as compared with last summer. The price for ordinary iron plates which was about Y.4.80 at the end of September and the early part of October has advanced to Y.6. Bar iron is being quoted at about Y.6.50, thin plates at about Y.9, tin plates at Y.33.50 for 170 pounds and Y.18.00 for 100 pounds, the current rates showing a rise of about 15 per cent. or so as compared with the prices during September. The advance is, however, due to a temporary increase of demand and prices are likely to fall again toward the end of the year.

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**IMPROVEMENTS AT YAWATA STEEL WORKS.**—During 1921, there will be no material change from the 1920 plans of the Japanese government steel works at Yawata with the exception of the output of pig iron, which is estimated at 470,000 tons, an increase of approximately 170,000 tons. This increase will be due to the new furnace (No. 6.), now under construction, which is expected to be completed in February. The Akatani mine installation in Niigata-ken, under direct control of the government iron works, is not expected to be completed during the next financial year. A plan is being considered for the establishment of an ore depôt at Niigata, so that it is important that the Niigata harbor works be completed at as early a date as possible for the transportation of ores when the new mine is producing. The works are expected to be finished in 1924, and the harbor will accommodate a 3,000-ton steamer alongside the pier, the depth of water being 25 feet. Pending completion of this new harbor scheme, vessels of 1,000 tons will be used on the ore-transport service. The new harbor works are to be used only in emergencies, as the Tayeh mine in China constitutes the principal source of ore supply.

No. 2 steel plate works will be completed by October, and it is anticipated that the products will be placed on the market at the end of the current year. These new works will turn out 300,000 tons of steel plate measuring 13" x 19' x 50', which will be used mostly for naval shipbuilding purposes.

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**PROFITS OF YAWATA IRON WORKS.**—Dr. Hattori, Vice-President of the Government Yawata Iron Works, told a representative of the *Osaka Asahi* that since 1910, the works have made a profit, netting Y.30,000,000 for 1917 and Y.57,000,000 for 1918. During the latter year the whole loss incurred since the date of formation was covered and an interest of 5 per cent. paid on it, and there was still a sum of Y.20,000,000 on the credit side.

In Japan, all iron works simply manufacture iron from iron ores, while in America, they do other business, saving a considerable amount of the cost of production. The government works are ready to manufacture anything even in small lots, when an order is placed with them.

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**DOUBTFUL EFFECT OF IRON MERCHANTS COMBINE AGAINST SALE.**—The leading iron merchants of Tokyo including the Morimura, Mizuhashi and several influential firms have recently organized a league against the sale of the stock held by those merchants for a certain fixed period with a view to checking further depreciation of market prices. The

members of the Mutsumi-kai, which is the name given to the league, have now decided to deposit 7,700 tons of iron bars held by them with the First Bank at the rate of Y.80 per ton in accordance with the resolution passed at the recent meeting of the merchants concerned. According to the latest investigations the stocks of iron bar accumulating in Tokyo and Yokohama at present reach between 70,000 and 80,000 tons. In the presence of such large stocks it is thought that the step taken by the Mutsumi-kai is likely to prove futile.

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**IRON COST HIGH IN CHINA.**—Recent investigations by an American steel man in China reveal that the cost of manufacturing pig iron in China is approximately G. \$50 per ton, as compared with G. \$27 in Pittsburg. The coke alone needed to make one ton of pig iron near Hankow costs \$33 Mexican. As opposed to the half-and-half Sino-American enterprise, complete foreign control management, *personnel* and even foreign foremen are deemed by the American investigator as necessary to success in the manufacture of iron and steel in China.

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**JAPANESE DEMAND FOR PIG IRON.**—According to advices received by the Department of Commerce, Washington, September 28, the Japanese demand for pig iron before the war amounted to 467,282 tons, 167,061 tons of which were imported. In 1919 this demand increased to 845,000 tons of which 200,000 tons were imported from the United States, England and China.

The *Japanese Gazette*, the advices state, calls attention to the increasing cost of production of pig iron experienced by iron and steel manufactures in Japan. One ton of pig iron involves an expenditure of at least Y.125 (\$62.31), the iron ore costing Y.45, coke Y.55, lime Y.5 and labor Y.20.

The same advices declare, owing to increasing scarcity of cargo, eleven of the 466 Japanese ships running on ocean and coastal lines aggregating 48,729 tons have recently been discarded. Should the present inactivity of the cargo situation continue, the number of cargo-boats lying idle in ports is expected to increase.

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**NEW ARMOR PLATE PLANT.**—The Yawata Steel Works, of Japan, is to have a special department for the production of the extra thick steel plates required in the construction of the new warships designed to constitute the first line in the future navy. The works will be ready next month, says Dr. Morino, chief engineer to the government, as quoted in the *Osaka papers*, but it will be about a couple of years before the prescribed output of 90,000 tons per annum will be attained because of the inexperience of the workmen.

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**KOBE STEEL MANUFACTURING CO.**—This company has completed the reclamation work at Akinohama commenced in 1917, on which the new works are to be erected.

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**IRON SAND TREATMENT.**—A method of treating iron sand has been completed by Dr. Kishi, who is a member of the Extraordinary Iron Material Investigation Society, and has been devoting himself to the study of the mode of manufacture since September of last year in Aomori prefecture, where immense quantities of iron sand are believed to lie hidden. The chief object of the research is for military purposes, but if it turns out successful, from an economic point of view, it will brighten the future of the iron industry in Japan.

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**SHEFFIELD FILLING BIG JAPANESE ORDER.**—A Tokyo dispatch from London says that Sheffield works have received a big order for armored materials for the Japanese government.

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**HOW TO DEVELOP JAPANESE IRON TRADE AND SHIPBUILDING.**—The Economic and Financial Commission in response to a request from the Japanese government to consider the question of the encouragement of the production of iron and of shipbuilding in Japan has decided to recommend the formation of a syndicate of national iron works for the purpose of procuring the raw material and distributing their output economically. It is also thought advisable to remove the import duties on shipbuilding steel, while pig iron should carry an import duty of 10 per cent *ad. val.* and other steel one of 15 per cent *ad. val.* The government should grant substantial aid to the iron manufacturers to an extent equivalent to the difference between the above revised duties and the existing conventional tariff until the term of that convention expires, and in case Japanese steel is employed in shipbuilding, its consumers and manufacturers may be given state aid corresponding to the import duties. The commission enumerates the amount of pig iron (excluding raw material for steel), steel and coal required in time of peace, as follows:—

Year	Pig Iron		Steel	
	(Excluding Raw Material for Steel) Metric Tons.		Metric Tons.	
1920...	...	...	377,616	1,031,551
1921...	...	...	467,619	1,099,251
1922...	...	...	437,106	1,164,081
1923...	...	...	466,186	1,227,421
1924...	...	...	491,666	1,287,421



The quantity of iron ore and coal is as follows :—

Year	Iron Ore Metric Tons.	Coal Metric Tons.
1920...	3,709,000	6,040,000
1921...	3,978,400	6,473,200
1922...	4,247,800	6,906,400
1923...	4,517,200	7,339,600
1924...	4,786,600	7,772,800

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**ARMOR PLATE ORDER, JAPAN.**—According to a London dispatch to the *Jiji*, a British firm at Sheffield will enter into a contract with the Japanese government for the supply of 5,000 tons of steel to be used for the building of one of the biggest dreadnoughts in Japan.

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**GOVERNMENT AID TO STEEL INDUSTRY, JAPAN.**—Baron Yamamoto, the Minister of Agriculture and Commerce, says that the government, while realizing the necessity of protecting the home steel industry, does not necessarily approve of the amalgamation of private iron-works, of which the Extraordinary Economic and Financial Society seems to be in favor. It is still undecided as to how the industry ought to be granted protection. The Minister expresses his inability to foretell when the prevailing economic panic will disappear, but is of opinion that it will last for some time, in view of the present conditions in the world.

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**AMERICAN MARKET CONDITIONS.**—With improved railroad traffic conditions, price premiums obtained for iron and steel products have been fading away. Due to better mill shipments and increased production, material has been more plentiful and actual or feared shortages have been relieved. Quotations gradually have been tending downward toward the levels which have been maintained by the leading interest for the past 18 months, although this tendency is more pronounced in some lines than in others. In practically every line, however, buyers have adopted a waiting attitude, placing orders only for urgent requirements. Both plates and shapes have been in light demand for some months, owing to the lack of shipbuilding orders and of new construction generally. Now, bars also have slumped somewhat in price, due to the falling off in demand from agricultural implement makers, some of whom are operating on as low a basis as 60 per cent. Some heavy cancellations of steel bars have been received by bar mills. Semi-finished materials, such as sheet bars and billets, also have experienced price reduction. Some weeks ago sheet bars destined to be rolled into highly finished sheets for the automobile industry sold as high as \$90 per ton, but with the slump in automobile buying, prices have declined, and sheet bars sold recently at \$60 per ton. In wire products, pipes, tin plate, and small bars the mills have as much business as they can handle and prices are being maintained on these products. New buying of pig iron has been almost at a standstill and prices have been dipping a little. However, the blast furnaces still have plenty of business on their books for some months yet and competition for business, therefore, has not been keen. Because of unfavorable exchange the export demand has continued slow and there have been many cancellations of export orders, with the result that resale materials have been thrown on the market in this country. Pig iron production is being well maintained, the total for the 30 days of September having been 3,124,994 tons, as against 3,145,536 tons in the 31 days of August. —*Market Report of the First National Bank of Boston.*

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**MINAMI TOKAI IRON MANUFACTURING CO.**—This concern, whose works are located at Fuji, has appointed Mr. F. Sano as managing director, and employed a new chief engineer from Osaka, for the purpose of enlarging and improving the efficiency of their plant.

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**NEW MACHINERY WORKS, NAGOYA.**—The Uchiyama Iron Works which has been operating as a partnership has been organized into a limited liability company with a capital of Y.100,000. An expansion of the works is to be made.

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**SHINOHARA IRON WORKS.**—The Company was organized for general foundry and machine works. Office: 26 Shichichome Tani-machi, Minami-ku, Osaka. Manager, Naosaburo Taniguchi.

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**NEW IRON WORKS, JAPAN.**—The Hokujo Foundry of Hokujo-machi, Hyogo, has been converted into a limited company capitalized at Y.300,000. Mr. S. Matsumoto has been appointed managing director. The company specializes in heavy castings and agricultural machinery.

## Pity the Poor Manchus!

### Bankrupt Peking Republic Has Failed to Pay Abdication Price and Now Empress and Princes Protest

**PEKING, November 20.**—Because the bankrupt Peking republic has failed to pay up the price stipulated by the house of Ching when the Manchus consented to abdicate, February, 1912, the empress and princes have joined in a pathetic protest to President Hsu Shih-chang. Recently, Prince Tsai-Hsu called upon the president and laid before him a long bill of grievances.

Chief among the causes of Manchu dissatisfaction is the failure of the Peking treasury to meet arrears of payment of privilege funds due to the Ching imperial house. Prince Tsai said these should be paid at an early date so as to relieve the empress of her deep anxieties. It should not be lost sight of that an amount of \$4,000,000 per annum was originally promised the Ching imperial house by the republic. No efforts have as yet been made to comply with this promise fully and punctually. For this reason, great deficits are incurred by the Chings. The president was further asked to advance an urgent amount of \$2,000,000. To this request, the president answered that means will be devised to comply with the desire of the empress at an early date, but that no definite promise can be made in view of the present stringency of finance confronting the Peking government.

The marriage of the boy emperor will take place early next year, and this occasion will necessitate an amount of \$1,500,000. The president, one of whose daughters is to be the bride, said that General Chin Yun-peng, the premier, will be consulted before any action can be taken. Further, he advised that economy should be exercised in the marriage ceremony.

## The Peking Syndicate's New Railway Agreement

**REUTER** learns that the Ching-Meng Railway agreement, mentioned in the railway notes of this number of *THE FAR EASTERN REVIEW*, authorizes a prolongation westwards of the Tao-Ching Railway from its present terminus, Chinghua, to Menghsien on the left bank of the Yellow River, immediately northeast of Honanfu, an important ferry over which the bulk of the trade between the Luanfu and Tzechow districts of Shansi and the south passes. The line, which will be about 65 kilometres in length, will pass through a highly cultivated district to which it will be of very considerable benefit by bringing it into direct communication with the main railway system of the country. The Peking Syndicate, Ltd., besides being administrators and general managers of the Tao-Ching Railway, possess very large mining interests in the locality. The agreement provides for a loan for the construction of the line, the net amount of which and the conditions of its issue are to be fixed not later than three years after the date of the agreement. In the meantime the syndicate is to advance to the government sufficient funds to commence and carry on the construction of the line. Both the loan and the advances are secured, *inter alia*, by a general guarantee of the government and by a mortgage on the permanent way of the railway and its earnings of the Tao-Ching Railway.

The construction of the line will be carried out under the control of an engineer nominated by the syndicate and appointed by the director of the Tao-Ching Railway administration, who will act concurrently as director of the new line. The engineer may, with the consent of the Tao-Ching Railway administration, employ in the work of construction, any of the staff, rolling stock, plant and tools of the Tao-Ching Railway, on rates to be determined by the director of the Tao-Ching Railway and the Peking Syndicate are appointed purchasing agents for the new line and upon all materials purchased abroad they will receive a commission of 3 per cent. on the net cost thereof.

No provision is made for rolling stock, it being arranged that when the line or part of it is opened for traffic, the rolling stock of the Tao-Ching Railway shall be used on the hire basis at rates to be fixed by the director of the Tao-Ching Railway and the Peking Syndicate with the approval of the ministry of communications. The terms of the loan agreement and also the working agreement of the Tao-Ching Railway will not apply to this agreement.

**A JAPANESE PHILANTHROPIST.**—Mr. Jiro Harada, former Managing Director of the Konoike firm, Tokyo, has donated Y.10,200,000 to assist in public works on a far-reaching scale.



# Engineering, Financial, Industrial and Commercial News

## RAILWAYS, NEW LINES, SUPPLIES, ETC.

**PEKING SYNDICATE LINE SANCTIONED.**—A mandate was issued on November 24, sanctioning the agreement between the Chiaotungpu and Peking Syndicate for the construction of the Chinghua-Menghsien branch of the Chinghua-Taokow Railway, in Honan.

**ELEVATED RAILWAY.**—The engineers of the new line from Amagasaki Bay to the main Tokkaido line are encountering great difficulties in locating a right of way because of the existence of other tramways and the Ki River, and have recommended the construction of an elevated track two miles in length to cost Y. 2,500,000, which is now before the authorities for approval.

**RAILWAY AGREEMENT WITH PEKIN SYNDICATE.**—The contract for the construction of a branch line of the Taokowa Tsinghua Railway in Honan by the Peking Syndicate has been signed between the ministry of communications and the syndicate.

**TOKYO UNDERGROUND.**—The Tokyo Underground Railroad Company has decided to start the work of construction of its first line between Shinagawa and Kaminarimon, Asakusa Park. The completion of the work will, it is estimated, require about three years. When completed, the line will bring Shinagawa-Asakusa Park within 25 minutes travelling time.

**NEW ZEALAND LOCOMOTIVE CONTRACT.**—The New Zealand government has accepted a tender of the North British Locomotive Co. of Glasgow for the supply of twenty-five railway locomotives to cost £12,350 each. Messrs. Cammel Laird Co. made successful tenders for two thousand five hundred railway wagons at £325 each. Tenders were also received from Canada, the United States and Germany.

**NEW MOTEGI SECTION.**—The Nanai-Motegi Section on the Motegi line, which is practically an extension of the present Maoka line in Tochigi prefecture, has just been completed. The total mileage of this new section is 8.4 miles. It was opened to public traffic November 15. Motegi is known for tungsten yields in its vicinity.

**NEW RAILWAY STATION.**—A new railway station will be constructed near the new Meiji shrine at an expense of Y.110,000.

**DR. NAKANISHI RESIGNS.**—Mr. Nakanishi, the vice-president of the South Manchuria Railway Company, who is suffering from acute nervous debility, has decided to resign his post. The government has not yet made its choice of his successor.

**HUGE RAILWAY TUNNELLING, JAPAN.**—The completion of the tunneling through the volcanic Hakone mountains to connect Odawara with Numazu by way of Atami, which is expected to be in 1924, will save the railway approximately Y.4,000,000 yearly, and lessen the trip by rail by one hour. The cost of the total work is about Y.60,000,000. Professional geologists and seismologists are in charge of the tunneling.

**RAILWAY SOCIETY, KOREA.**—The first meeting of

the new Railway Association composed of the officials of the South Manchuria and private Korean lines was held at the Chosen Hotel at Seoul on October 24.

**PRIVATE RAILWAY SUBSIDIES.**—The Japanese Railway Department is expected to introduce a new bill in the Diet at the coming session for authorization to increase the subsidy to private railways. At present the law permits the government to make good any deficiency in the earnings to enable the roads to pay a dividend of five per cent. The new law will permit the payment of six per cent. dividends. The estimated subsidies under this system are Y.900,000.

**CHEFOO-WEIHSIEN LINE.**—The ministry of communications has donated 150,000 yuan for the construction of the Chefoo-Weihsien line, Shantung, the bed for which has been built to a distance of more than 20 li. The engineering department is making a request for another 150,000 yuan.

**START WORK ON LUNGHAI LINE.**—A party of Belgian engineers has arrived at Haichow to commence the completion of the Lunghai railway. Plans and specifications are now being prepared.

**AUTOMATIC RAILWAY SIGNALS, JAPAN.**—The railway department ordered 300 automatic signalling machines from the United States which arrived in Japan recently and will be installed immediately. It has been decided to install similar signals on all the Tokkaido lines at an expense of Y.1,600,000, which includes the cost of electrical generating stations. The current for the lines radiating from Tokyo will be supplied by the government power house. For the Osaka district a new 400 kilowatt power house will be erected at Suida, to cost Y.250,000. For the Kyoto district, the current will be taken from the local power company.

**TOKYO SUBWAY COMPANY REORGANIZED.**—The general business slump of last spring practically killed the immediate chances of successful flotation of the various rapid-transit schemes for the city and district of Tokyo. Several of these companies were in various stages of promotion and considerable progress made in raising capital and carrying out preliminary surveys, preparing estimates, etc. Amongst these were the Tokyo Subway Company, Limited, promoted by Mr. Tokuji Hayakawa, The Musashi Electric Railway Company, promoted by Baron S. Go, the Tokyo Rapid-Transit Railway Company, promoted by Mr. T. Toshimitsu and the Tokyo Railway Company by Mr. Giichi Iida. The capitalization of these companies ranged from Y.35,000,000 to Y.70,000,000. In order to carry through the first part of the subway plans the capital of this enterprise was recently reduced from Y.40,000,000 to Y.10,000,000 and sufficient capital paid in to enable registration and the commencement of work. The Tokyo Railway Company has now amalgamated with the Subway Company, which has influenced the other two promoters to resume activities. It is expected that all these enterprises will be merged into one corporation. The railway department in granting permission to operate will require complete uniformity in the

equipment of all such lines to permit free interchange of traffic.

**NEW SECTION OPENED.**—The railway department has completed the Shigeyasu-Fukuma section on the Mine Light Railway, the Gifu-Kagamigahara section on the Takayama line and the Asachino-Kishibetsu section on the Soya line. All three sections were opened to public traffic on November 1.

**KOREAN FOREST RAILWAY.**—The Chosen Sangyo Tetsudo (Korean Industrial Railway), organized during the boom, has been hard hit on account of the depression. Sixty shareholders have filed an application to the board of directors to call a general meeting in order to decide on the dissolution of the Company. The *Seoul Press* adds that the dissolution of the Chosen Kogyo Railway Company, which was organized about the same time as the Sangyo and a few other railway companies, has already been determined on.

**SOUTH MANCHURIA RAILWAY.**—The condition of the South Manchuria Railway Company has improved through the issue of debentures, the discharge of employees and a reduction in its higher staff. According to the budget, the company was to carry on enterprises amounting to Y.70,000,000 for this fiscal year and to Y.20,000,000 brought over from the preceding year, for which the company has provided a sum of Y.50,000,000, a loan of Y.16,000,000 lent by the government, a call of Y.12,000,000 on its shares, the present issue of debentures of Y.10,000,000, and its reserve totalling Y.13,000,000. There is still a shortage of Y.40,000,000. It is expected that 30 or 40 per cent. of the enterprises, which cannot be consummated within the current financial year for unavoidable reasons, will be carried forward to the next financial year.

**RAILWAY EXHIBITION, JAPAN.**—The idea is gaining favor among the railway authorities of holding a big celebration next year about April or May in honor of the 50th anniversary of the opening of railways in Japan. It is also proposed that a railway exhibition should be simultaneously opened, and lectures be organized in order to diffuse knowledge concerning the good work done by railways in all directions.

**LIGHT RAILWAY, SAGHALIEN.**—A party of 198 military engineers and 840 coolies, who have been engaged in constructing barracks and 50 miles of light railway at Alexandrovsk, has returned to Japan. Only two-thirds of the work had been finished, the temperature of 10 degrees below zero compelling its postponement.

The new railway line is now open for the transport of cargo between Alexandrovsk and the finished point.

**NEW RAILWAY SECTIONS OPENED.**—The section between Nayori and Kamiobe on the Nayori Line in Hokkaido, a distance of 24.16 miles has been completed. Unusual difficulties were experienced in the construction, some of the embankments being 41-ft. in height, and earth cuts to the depth of 32-ft., in addition to four steel bridges.

**JAPANESE COLONIAL RAILWAY ESTIMATES.**—The



Formosan budget for 1921 exceeds Y.110,000,000, an increase of Y.16,000,000 over the present year. The increase arises from the higher costs of construction for the railway extensions and improvements. An increase of Y.2,000,000 is also provided for in the Karafuto budget for railway extensions.

**CHINESE WAR LORDS TO "PROTECT" RAILWAYS?**—After negotiation, Generals Tsao Kun and Chang Tso-lin have decided to divide between themselves the responsibility of "protecting" the various northern Chinese railway lines. The Peking-Hankow Railway is placed under the "protection" of the troops of the 3rd army division and the 16th mixed brigade, under the respective commands of Generals Wu Pei-fu and Feng Yu-hsiang. These troops are distributed at strategic points of the line at the discretion of their Chihli commanders. The Peking-Mukden and the Tientsin-Pukow lines are under the "protection" of the Fengtien troops of the 1st army division and the 2nd mixed brigade under the respective commands of General Chang Ching-hui and Tseng Tien-sheng, "who shall have full control of these two lines."

**BRITISH SUPPORT RAILWAY BETTERMENT.**—The conference of British Chambers of Commerce at Shanghai passed the following resolutions: (1) To support the efforts of the railway authorities to improve railway organization and obtain sanction for an increase of rolling stock; (2) In view of the Chinese government's efforts to standardize the railway system to commend to the consideration of British manufacturers the opinion that British railway engineering should be adequately represented in China.

**NEW JAPANESE STATION, HAMAMATSU.**—A new railway station and yards to occupy a total of 23,000 *tsubo* is to be constructed at Hamamatsu City. The new station will house the telephone and telegraph service on the second floor, and the capacity of the yards will be doubled.

**KIN-HAN BUYS SLEEPERS FROM MITSUI BUSSAN KAISHA.**—The Peking-Hankow railway board has ordered 100,000 sleepers from Mitsui Bussan Kaisha.

**SHIMONOSEKI-MOJI SUBMARINE RAILWAY TUNNEL.**—The survey of the Shimonoseki-Moji submarine railway tunnel is estimated to cost Y.1,800,000 and will take a year to complete. The tunnel will be six miles long and will cost 25 million yen. The survey work has already been commenced.

**CONTRACT SIGNED FOR TSING-MAN RAILWAY, HONAN.**—A loan contract with the Peking Syndicate, Peking, for the purchase of 200 freight cars for use on the Tsing-Man railway (branch line of Tao-tsing railway, Honan) has been signed by the Chinese ministers of communications and finance.

**NEW ZEALAND RAILWAY ELECTRIFICATION.**—The Zealand government has accepted the tender of the English Electric Company for the Arthur's Pass electrical section of the main line railway. The progress of this railway electrification will be watched with interest by engineers, as it presents points of unusual technical difficulty. The section includes a tunnel 5½ miles in length through the mountains, and the steepest gradient is one in thirty.

**RAILWAY WORK FOR FAMINE LABOR.**—A wealthy resident of Shensi, Mr. Hung Po-lu, has offered to provide the necessary funds for the construction of the Tungkuan-Fenghsiangfu section of the Lunghai railway, with famine labor. The offer is being considered by the director of the Lunghai Railway.

**RAILWAY CONSTRUCTION, HOKKAIDO.**—The 1921 plans for new railway construction in Hokkaido

cover about 300 miles and it is expected that work will be pushed on the Nissho line first.

**SHAREHOLDERS' MEETING OF C.E.R.**—The following agreements were reached at the recent a meeting of shareholders of the Chinese Eastern Railway:—(1) "That the management of shares of China and Russia and the distribution of the privileges among the other small shareholders should be transacted according to the decisions made by the last meeting of the Russo-Asiatic Bank, and all the necessary progressive measures be discussed by the following meeting of Directors; (2) that the number of engineers, technologists, etc., supplied by China, Japan, Russia and America, should be in proportion to the share capital the said governments have respectively invested in this railway; and (3) that the other measures of transportation and finance should be carried out one by one in the near future."

#### GOVERNMENT FINANCE

**JAPANESE BONDS ISSUED IN FRANCE.**—Japanese bonds issued abroad have been imported in increased quantities imports exceeding exports to the extent of Y.20,000,000 on an average for the past few years. The 4 per cent. issues in France are most favored and have advanced to more than 1,300 francs against their face value of 1,000 francs. They are calculated to yield an actual interest of 8.7 per cent., when their market price is 1,330 francs and the exchange rate between Japan and France 7.47 francs. They are considered, therefore, a good investment not only by bankers, but by traders who prefer them to cash in the settlement of their accounts with the French buyers.

**JAPAN'S NEXT BUDGET.**—Departmental estimates for the next fiscal year total about 1,800 million yen, being 500 million yen more than the current budget. The natural increase of revenue will not be as large as originally expected, and the increase of surplus available for the next fiscal year will not exceed 150 million yen. Recourse may be had to increased taxation. Meanwhile, the finance minister has been persistently urging a general retrenchment of the departmental estimates, and demanding that their new bills be curtailed by from 80 to 90 (?) per cent. Viscount Takahashi is also said to have explained to Admiral Saito, governor-general of Korea, that the government could not give such an enormous credit to Korea as he is reported by the papers to have been demanding.

**PEKING GOVERNMENT NEEDS \$30,000,000—AND HAS NOWHERE TO GET IT!**—According to information from the ministry of finance, the Peking government is placed in a very difficult situation, since no sufficient funds are available to tide over the difficulties of the coming new year. Foreign loans cannot be obtained, since foreigners begin to collect Chinese National and Domestic Bonds on an extensive scale owing to the great amount of interest attached to such bonds. New National Bonds do not attract much attention from the public and the market is therefore very unpromising. The first year bonds are sold in Peking at the rate of 414 whilst those in Shanghai fetched only \$19. There are only a few millions of bonds in the ministry. The special funds promised by the various Provinces do not come in yet. No great reliance can be placed upon the Customs and Salt Surplus. The smallest amount which is required by the central government to pass the coming new year is in the neighborhood of \$30,000,000.—Peking Correspondence.

**COINS IN VLADIVOSTOK.**—As the result of the last order whereby post and telegraph offices were

instructed to accept only money in the form of coins, large numbers of Russian gold, silver and copper coins are being received in these institutions. Big silver coins, such as the one-rouble coin, the half-rouble and the quarter-rouble, are received at the rate of value of gold coins, while copper money is received at the rate of silver change.

**JAPAN'S SPECIE HOLDINGS CONTINUE TO INCREASE.**—The amount of specie held by the Japanese government and the Bank of Japan both in Japanese and foreign markets on October 15 reached Y.2,052,000,000, this being a remarkable increase of Y.25,000,000 on the figure that obtained on the 1st of the same month. The figure is only second to the highest mark reached in December last year when the amount was Y.2,057,000,000. The reason for this conspicuous increase is due to the increase of specie brought home from abroad by the exchange banks, viewed from the existing condition of the foreign exchange business the increase is likely to continue for some time yet. The figure on October 15 is apportioned as follows:—

	Amount on Oct. 15	Increase on the previous figure
Held by Government	887 million yen	1 million yen
Held by the Bank of Japan	1,165 million yen	24 million yen
Total	2,052 million yen	25 million yen
Held in Japan	904 million yen	28 million yen
Held abroad	1,148 million yen	3 million yen (dec.)
Total	2,052 million yen	25 million yen

**MILLION DOLLAR LOAN FOR CANTON GOVERNMENT: SALT REVENUE AS SECURITY.**—The leading merchants and citizens of Canton, meeting at the General Chamber of Commerce rooms on November 9, decided to raise a loan of \$1,000,000 for the Kwantung government. Before the decision, Commissioner Liao Chung-hai, of the bureau of finance, gave a description of the needs of the Cantonese army. The loan shall be raised in the following terms:—(1) a sum of \$1,000,000 at an interest of 8 per cent. annually shall be raised without delay; (2) forty per cent. of the loan shall be repaid at the end of four months, the rest to be repaid thirty per cent. at the end of each three subsequent months with interest, full payment within a year from date of the loan, at the latest; (3) the salt revenue shall be offered as security for the loan; and that the General Chamber of Commerce shall be agent to undertake the loan. Financial bureau issuing notes that will be accepted as legal tender for the payment of tax and other public dues.

**FRENCH LOAN REWRITTEN.**—The French treasury loan amounting to Y.30,342,000 which was issued in Tokyo in August last year and was taken up by the deposit department of the Japanese government treasury, was rewritten October 26, the day of maturity, on the same conditions, i.e., for one year at 8.5 per cent. interest including 1 per cent. commission. The notes were entirely taken up by a few influential banks in Tokyo and Osaka.

**NEW PHILIPPINE CURRENCY LAW.**—The Philippine senate has adopted without debate the amendment of Senator Guanco to the currency law, which is intended to solve the present currency stringency and exchange situation in the Philippines. Among the most important provisions of the bill is the fixing of the reserve funds of the government at not less than 60 per cent. of the nominal value of the treasury certificates in circulation, until the total circulation has reached P.120,000,000. The bill also authorizes the government to pay a premium on all exchange bought in New York.

**CALCUTTA RAISING LOCAL LOAN.**—The Calcutta Corporation has requested the Indian government



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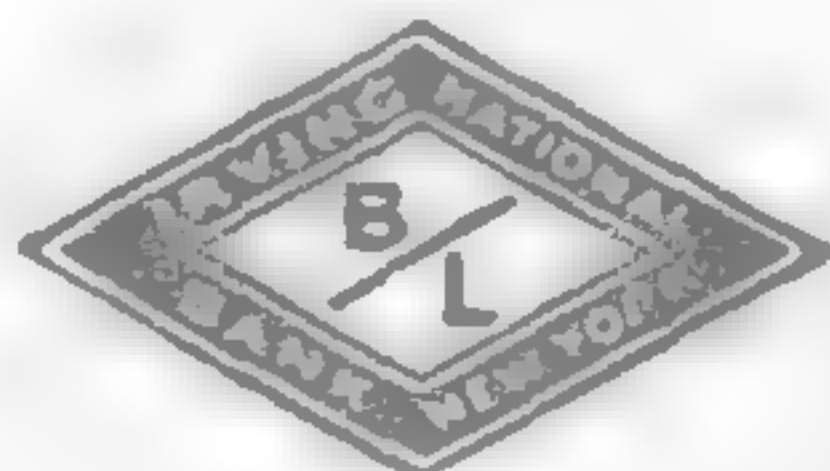
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to sanction the raising in the open market of loans aggregating Rs. 5,526,000 at 7 per cent. interest.

**JAPANESE RE-IMPORTATION OF FOREIGN BONDS.**—The Japanese government is encouraging the purchase of its foreign issues under the present favorable exchange rate, and a syndicate has been formed to reimport. Those most in favor are the French bonds. The official rate of conversion of the 4 per cent. bond is Y.39 per 100 francs; the present market price is only Y.18.50 and the actual interest works out as high as 8 or 10 per cent. It is expected that about 1,500,000 worth of franc bonds will be reimported during October and November. They are free of income tax and may be deposited as security with the government. Considerable quantities of British issues are also being brought back to Japan.

**PEKING PARLIAMENT AUTHORIZES FAMINE RELIEF LOANS.**—The Peking Parliament has adopted the resolution submitted by the ministry of the interior to issue domestic loan bonds to the amount of 4,000,000 yuan for famine relief.

**CHIHLI FAMINE LOAN.**—The Chihli Provincial Assembly, meeting in Tientsin on November 1, resolved to float an American loan if it is attainable for \$12,900,000 Mexican for the purpose of famine relief, based on an official survey of the requirements of the province. The security to be offered for the loan would be a first lien on the provincial land tax until the loan is redeemed, this being the first instance in the history of China of a land tax being proposed by a provincial body as security for a foreign loan.

**MUNICIPAL BUDGET, TOKYO.**—It is estimated that the next municipal budget for the city of Tokyo will be Y.30,000,000. This will be an increase of Y.12,000,000 on this year's budget.

**CHINESE BANKERS OPPOSE CONSORTIUM.**—At a meeting of Chinese bankers it was decided to ask the government not to accept the consortium terms. If necessary the bankers declared they would provide the money to enable the government to disband the troops.

**REDEEMING BANK NOTES IN HUNAN.**—Of the bank notes worth 1,200,000 yuan, newly issued by the Hunan government, 200,000 yuan have already been redeemed, and since people have frequently complained about the depreciation of these notes, the provincial government now lays down the following rules for redemption: (1) The Changsha Chamber of Commerce shall be responsible for the gradual redemption of all the notes within six months; (2) The mint to hand over 10,000 chuen copper coins daily to the Chamber of Commerce in exchange for the notes; (3) To burn, in the presence of the public, all the redeemed notes after they have been counted and examined.

**CHINESE NATIVE CUSTOMS RECEIPTS.**—According to a report made by Mr. Yao Wen-fu, Chinese superintendent of the Maritime Customs, the Customs service collected the sum of Tls. 14,390,000-odd for the year 1919, being 30 per cent. more than the receipts for the previous year. The amount is only 200,000-odd taels less than the receipts of 1913, the record year, when the receipts on the importation of opium alone were over Tls. 2,400,000.

**INDIAN CUSTOMS REVENUE.**—For the six months, April-September, 1920, the gross Indian sea and land customs revenue showed an increase, mainly due to: Cotton manufactures, metals, hardware, liquors and tobacco.

**COMPENSATION TO COAL MINERS' FAMILIES.**—\$1,000 compensation has been directed to be pre-

sented by the ministry of agriculture and commerce to the family of each of the 420 coal-miners who died in a mine explosion of the Kailan Coal Mining Company.

**REDEEMED BANK NOTES TO BE BURNED.**—Under the supervision of the domestic bonds bureau, the notes of the Bank of China and the Bank of Communications redeemed in October, are ordered to be burned at the Temple of Agriculture, Peking, in the near future.

**CHINA'S BILL TO REPARATIONS COMMITTEE.**—According to a Paris despatch, the Chinese representative has submitted China's bill for reparations to the reparations committee. The amount demanded is \$46,000,000 in Chinese currency.

**NEW COINS, JAPAN.**—The Japanese government will mint ten cent nickel pieces in place of silver.

**DETERMINED TO ENFORCE INCOME TAX.**—With a view to increasing the national revenue, the Chinese Government has resolved to enforce the imposition of the income tax. An office has been organized under the ministry of finance to cope with the work. Mr. Chen Kwan-bih and Mr. Cheng Chey-chung have been respectively delegated by the ministry of agriculture and commerce, and the ministry of education to co-operate.

**SHANSI PEOPLE OPPOSE MINING LOAN.**—The natives of Shansi in Peking protest against the intention of their model Tuchun Yen Hsi-shan, to negotiate foreign loans for \$5,000,000 on the security of certain mining rights.

**WINE AND TOBACCO BONDS PROPOSED.**—For the purpose of repaying the Pacific Development Co.'s loan of \$5,500,000, and other outstanding debts, a proposal has been made to the Chinese ministry of finance to issue \$50,000,000 worth of wine and tobacco bonds.

**"BELONG SQUEEZE!"**—Representatives of Tsen Chun-hsuan and the Kwangsi party of the South, Chu Chung-siu and Wen Chun, have asked the Peking government for \$500,000 for expenses incurred in their "cancellation" of the military government at Canton. Chin Yun-peng, the Peking Premier, has referred the matter to the ministry of finance.

**"NO FOREIGN LOANS"**—Most of the steps for the reconstruction of the country after the union of the North and South have been deliberated and decided upon, and one of them is not to use foreign loans for the reconstruction fund.—*Sin Wan Pao*.

## COMMERCIAL FINANCE

**INSECURITY AND UNCERTAINTY IN CHINA.**—Chinese money markets all report insecurity and uncertainty. Liquidations are proceeding apace, chiefly among new firms and heavy losses are expected because of the utter inability of mushroom concerns to meet their obligations. Where possible, the banks have discounted the future by removing goods upon which advances have been made to godowns where they will be held pending liquidation. A. L. Anderson & Co.'s report (November 20) sums up the Shanghai trading situation as follows: "Two weeks have elapsed since we last addressed you, but the volume of business transacted during the interval might easily have been arranged in a single day. The slight improvement manifested in cottons at the beginning of the month proved to be only a flash in the pan and faded away as soon as outport visitors to the local race-

meeting had been supplied. The fall in sterling exchange is much more than counterbalanced from the rubber shareholders' point of view by the drop in the price of the commodity, and the weakness of the Singapore rubber-market is giving rubber company directors furiously to think. With a purchasing price lower than that at which a number of companies can produce, it cannot be denied that the future of rubber appears somewhat gloomy, and it must be remembered that the law of supply and demand does not, in this case, make itself felt immediately, since weak companies must sell, even at a loss, in order to pay their labor, or allow their plantations to revert to jungle."

**JAPANESE COMPANIES DISSOLVED.**—The number of companies in Japan liquidated during October was on the increase as compared with the previous month. Altogether 203 banks and companies were dissolved during that month, the amount of their capitalization aggregating Y.15,955,751.

Kinds of business.	No. of Companies.	Capitalization.
Banks	3	2,250,000
Trust and Monetary	11	328,000
Spinning	1	20,000
Mining	1	1,200,000
Railroad	2	40,000
Shipping	11	285,750
Warehousing	1	50,000
Manufacturing Industry	85	6,364,101
Commercial and other	88	6,397,900

**NEW COMPANIES, JAPAN.**—223 new companies were organized in Japan during September with an authorized capital of Y.22,512,750, an increase of 57 companies over August, and an increase of Y.9,831,470 in capital.

	No. of Co.	Authorized Capital
Trading	118	Y.9,226,700
Industrial	76	10,743,050
Mining	—	—
Agricultural	3	54,500
Forestry	6	462,500
Fishery	2	550,000
Transportation	9	647,500
Miscellaneous	6	828,500

The total number of new companies since the beginning of this year reached 4,807. Their combined authorized capital reached Y.632,318,257. Compared with the corresponding period last year, the former figure was a decrease of 345, but the latter was an increase of Y.294,106,178.

**EXPECTED JAVA FAILURES.**—Trade Commissioner John A. Fowler, at Batavia, reports that the Java markets are demoralized to such an extent that failures are expected.

**CRISIS IN PEKING MONEY MARKET.**—A crisis has occurred in the Peking money market causing a depression in trade. Even the market for up-to-date commodities such as: fur, satin, pongee, leather, etc., is very dull and the business transacted is only 60 per cent. of last year's. Shortage of money in circulation is the chief cause of the depression, but it is also effected by excessive export of ready money, the bankers keeping it from circulating on account of the approaching New Year's settlement.

**INCORPORATED COMPANIES, KOREA.**—The Bank of Chosen reports 26 new companies in Korea during the month of August, with a total capitalization of Y.5,238,000. During the same month, five companies with a total capital of Y.1,400,000 were dissolved. There are now 529 registered companies in Korea with an aggregate capital of Y.171,406,000.

**WHELAN TO CONTROL TOBACCO PRODUCTS.**—It is announced in New York that the Tobacco Products



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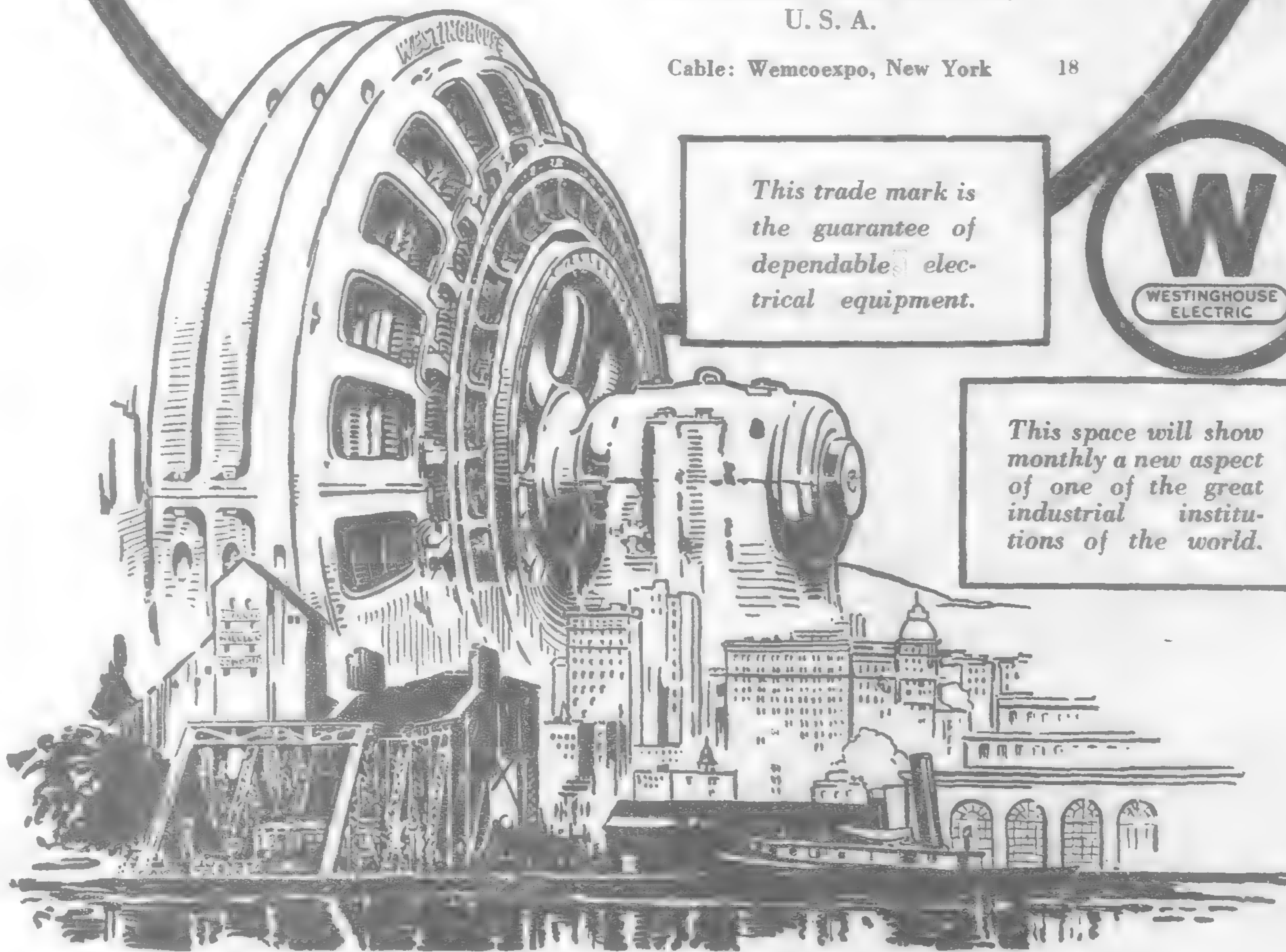
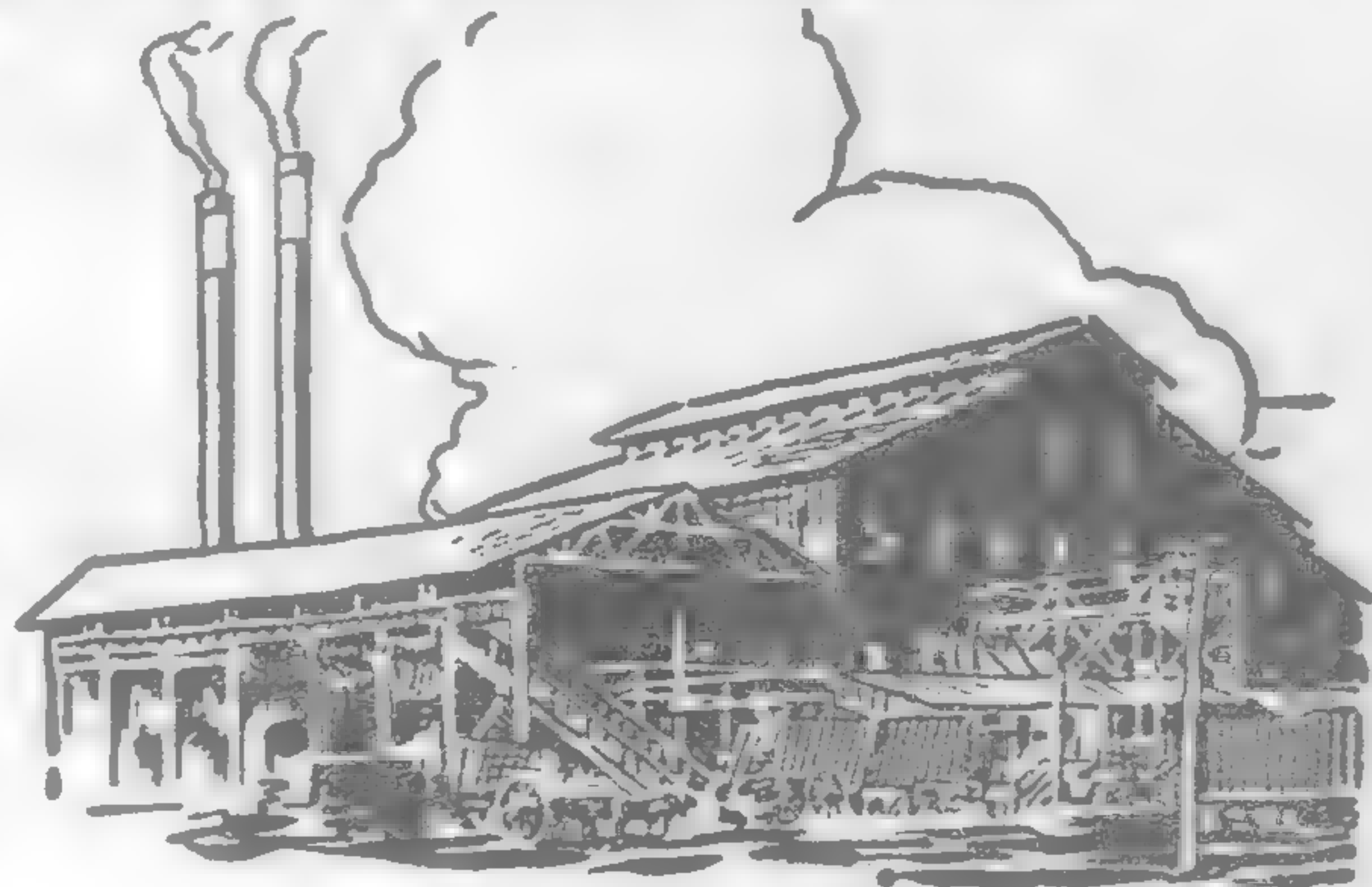
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Corporation, which has extensive interests in China and the Philippines, is to be absorbed with other large tobacco concerns by the International Tobacco Corporation being formed by George J. Whelan and associates.

**LIFE INSURANCE IN JAPAN.**—Since last June there has been a decrease in the number of new contracts, while cancellations have been increasing rapidly. Few new contracts are for more than Y.10,000; engagements for Y.1,000 and under are also very scarce, while there is no remarkable decrease in contracts ranging from Y.1,000 to Y.3,000.

**COTTON YARN EXPORT COMPANY PLAN.**—The plan for a new joint stock company for the export of cotton yarns with a view to relieving the present depressed situation of the markets, promoted by Mr. Wada, president of the Fuji cotton mill, Mr. Miyajima, president of the Nisshin cotton mills, Mr. Kita, president of the Japan cotton company, and other influential cotton yarn manufacturers and merchants of Tokyo and Osaka, was formally announced to a meeting of the cotton manufacturers and merchants union in Osaka on October 28 and was unanimously approved. According to the prospectus the company will be capitalized at Y.30,000,000 of which Y.15,000,000 will be paid up at once. The organization and purpose are similar to that of the Imperial Silk Company. The company is to be styled the Japan Cotton Yarn Export Company.

**JAPANESE FINANCIAL RECOVERY.**—"The Japanese government has stepped into the silk industry and the raw silk market has advanced sharply. The official plan is intended to 'peg' the price through control of exports and curtailment of production. Japan has at last succeeded in reversing her adverse trade flow. Tokio dispatches state that in August Japan's exports were greater than imports for the first time in nearly a year. Figures are not yet available, but if reports be true a most remarkable improvement has taken place."—Park-Union Foreign Banking Corporation circular.

**KITA OSAKA ELECTRIC TRAMWAY CO., LTD.**—This concern has increased its capital to Y.4,000,000 for the purpose of extensions and improvements.

#### BONDS, DEBENTURES, LOANS

**FUJI PAPER MANUFACTURING CO.'S BONDS.**—The new issue of the Fuji Paper Manufacturing Company was over-subscribed and the list closed in 24 hours.

**HOKKAIDO BANK DEBENTURES.**—The Hokkaido Development Bank sold new debentures to the amount of Y.6,000,000 through its underwriters on October 25. The rate of interest is 8 per cent. per annum.

**NIPPON STEEL WORKS LOAN.**—The Nippon Steel Works has floated bonds for Y.5,000,000, redeemable in three years. Interest is 8 per cent. per annum, net yield 9.27 per cent., issue price 97. The payment of the whole amount is called up December 1.

**KOREAN CENTRAL RAILWAY BONDS.**—The Bank of Chosen is underwriting an issue of Y.3,500,000, eight per cent. bonds at 96 for the Korean Central Railway.

**S. M. R. NEW BOND ISSUE.**—The South Manchuria Railway Company has sold new debentures to the amount of Y.15,000,000 through its underwriters, including the Industrial Bank of Japan, the Yokohama Specie Bank, the Bank of Taiwan, the Bank of Chosen, the Dai Ichi Bank, the Mitsui Bank, the Mitsubishi Bank, the 15th Bank and others. This new issue was offered at 95 per cent.,

which, with interest at 7 per cent. per annum, makes the net yield 8.69 per cent. per annum. The issue will mature in four years.

**MUSASHI ELECTRIC RAILROAD IMPORTING AMERICAN CAPITAL.**—The Musashi Electric Railroad Company which plans to lay an underground railroad of 4 miles length between Shybuya in Tokyo and an overland railroad of 15 miles between Shibuya and Yokohama having failed to obtain the necessary capital in the country, is said to be negotiating with a certain American capitalist connected with the Pearson Corporation of New York.

**TRAMWAY LOAN TO OSAKA AND HYOGO.**—The recent Y.1,500,000 loan from the Hanshin Electric Tramway Company to Osaka and Hyogo Prefectures will be apportioned as follows: Y.1,000,000 to Hyogo and Y.500,000 to Osaka prefecture, of which Y.329,000 will go to the city and Y.171,000 to the prefecture. The city will construct the commercial hall from its share.

**FUJI PAPER MANUFACTURING COMPANY** will float a new loan to the amount of Y.5,000,000.

#### BANKS

**DR. REINSCH TO HEAD CHINESE BANK.**—Another joint Chinese-American Bank is shortly to be organized by a number of Chinese and American capitalists. The Pacific Commercial Bank, for such will be the name of the new bank, will be a limited liability institution with its head office in Shanghai and branches in outports and foreign countries. It will have a capital of G.\$5,000,000 in 50,000 shares of G.\$100 each, one-half, at least, of which must be owned by Chinese. There will be 11 members on the Board of Governors, five of whom will be Americans and six Chinese. They will hold office for a period of five years. The managing director will be a Chinese, the manager an American, and a Chinese will be the assistant manager. Among those interested in the new concern are Dr. Paul S. Reinsch, former U. S. Minister to China; Mr. Chow Tze-chi, Minister of Finance; Mr. Wong Kok-shan, former general manager of the Han Yeh Ping Company; Mr. U. Yukchi, former comrade of Messrs. Dodwell & Co.; Mr. Li Sum-ling, the well-known writer, and others.—*Shanghai Times*.

**CENTRAL BANK FOR MANCHURIA.**—Although the Bank of Chosen has its branches in all principal centres of Manchuria, it is contended that it cannot fully cover the requirements for the proper development of the province and Inner Mongolia. A plan is now being considered by the government for the establishment of a Central Bank for Manchuria. A public report is expected as soon as the investigations are completed.

**AMERICAN BANK FOR SINGAPORE.**—A branch of the Asia Banking Corporation, in charge of Mr. J. H. Witchers, assistant general manager, is to be opened in Singapore.

**NEW BANK AT TSINANFU.**—A branch of the Banque Industrielle de Chine has been opened at Tsinan opposite the Chinese Post Office on the En Malu.

**ORGANIZING CHINESE BANKING GROUP.**—Pan Fuh, vice-minister of finance, is organizing a banking group to assist the Peking government in times of financial distress. It is an open secret that the bankers hope to be permitted to participate as a Chinese group in the operation of the Chinese Financial Consortium.

**BANKING MERGER, NAGOYA.**—The Aichi Bank of Nagoya is negotiating a merger with the Ita Bank

in the same city. The former bank is capitalized at Y.7,000,000, the latter is a private bank with a capital of Y.1,000,000 owned by Mr. M. Ito of Nagoya.

#### ELECTRIC LIGHTING, POWER, ETC.

**ELECTRICAL COMBINATIONS, JAPAN.**—An official report from the electricity bureau of the ministry of communications says that since January, 34 electrical concerns have been amalgamated. The total of their authorized capital has reached Y.283,402,000. According to the same report negotiations are now pending among ten more concerns for a merger.

**TO REINTRODUCE BILLS.**—The railway department is credited with a decision to reintroduce its bill in the Diet to establish a semi-official power company capitalized at Y.100,000,000.

**PROPOSED ELECTRIC LIGHT FOR IPOH.**—The electric lighting of Ipoh, Straits Settlements, by power generated at the Pengkalen Mines, will not be completed before January 1922.

**FUJI ELECTRICAL INDUSTRIAL CO., LTD.**—Registered in October with a capital of Y.30,000, one-quarter paid-up, to manufacture general electric appliances. Office, 1030 Shimoshibuya, Tokyo-fu, Managing Director, T. Takata.

**NANIWAYA COMPANY.**—This concern was formed recently as a partnership to engage in the sale of electrical apparatus, etc., and for general electric construction work. Office, 36 Itchome, Shinjibashi-dori, Minami-ku, Osaka. Manager, Yasuaburo Fukui.

**NOHI ELECTRIC COMPANY, LTD.**—The original plan to capitalize this company at Y.10,000,000 has been changed and the capital cut in half. The plan, calling for the development of 10,000 kilowatts has been altered to 3,500 kilowatts. This power will be supplied to the Nagoya Electric Light Company, who will take from one-third to one-half of the shares of the new company. The Managing Director is Mr. Ki Kanematsu.

**GERMANS SECURE CHINESE CONTRACT.**—The "North-China Daily News" reports that Herr Kocher, German engineer, has been nominated as director-general for China of the electrical supply firm of Siemens and that he has made contracts to supply all the machinery necessary for the exploitation of a colliery near Hangchow. This is despite the fact that Germany has maintained its inability to manufacture such machinery for the restoration of the French coal fields. Moreover, Kocher has ordered from Germany a quantity of electrical tramway and factory equipment, severely undercutting the prices and terms offered by dealers in British, French and American equipment. Chinese reports state that Siemens & Co. are organizing a large new Sino-German electrical concern, to carry on manufacturing at Tientsin and Shanghai.

**POWER PLANT PURCHASES.**—The Japanese railway department will instruct its purchasing office in New York to buy equipments for its power plant under construction at Akabane near Tokyo. The plant will be completed in 1922, and will be used to electrify more lines radiating from Tokyo. The Japanese Government Railway Purchasing Offices are located in Metropolitan Life Building, New York.

**THE OSAKA ELECTRIC LIGHT CO.**—The Osaka Municipality has refused the unconditional increase of capital of the Osaka Electric Company. The management of the company met at its office in



order to discuss relief measures. The matter being of great importance to the company, it was left for another conference after some discussion. Although the company seems to be inclined to ask the Municipality to think better of its decision, nothing definite has been decided.

**NEW ELECTRIC MANUFACTURING COMPANY.**—The Goso Electrical Works partnership, was formed on September 22 at 61 Yamate-dori, Kobe, for the manufacture and sale of electrical appliances. Manager, Y. Kashiwagi.

**GOVERNMENT STEAM GENERATING PLANT.**—The government has purchased in the United States through its engineer, Mr. Nida, the machinery, for the new power generating station at Akabane for distributing current to the government electric lines. It is expected to be completed some time in 1922, when, if present conditions prevail, the contract for the supply of current from private companies will be cancelled in the Tokyo district.

**MAYMYO ENTERPRISE.**—A company has been formed with a capital of five lakhs to obtain a license for supplying electric light and power to the town of Maymyo and cantonments.

**DAIDO WATER POWER COMPANY, LTD.**—The recent amalgamation of the Osaka Power Transmission Nippon Water Power and the Kiso Electric Companies with a capital of Y.100,000,000 is to be known as the Daido Water Power Company. The contract will be submitted for approval at the meeting of the shareholders on November 2.

**AZUMA ELECTRIC BULB MANUFACTURING Co., LTD.**—Organized with a capital of Y.200,000, one-quarter paid-up, for the manufacture and sale of electric light bulbs. Offices, 18 Torihatago-cho, Asakusaku. Tokyo. Managing Director, T. Sakai.

**COPPER TELEPHONE WIRE.**—At a meeting of the seven construction heads of the Department of Communications held on October 18, discussed the advisability of substituting copper for the iron telephone and telegraph wires now in use to obviate the constant breakage and interruptions from oxidation.

**NIPPON POWER.**—The Nippon Electric Power Company will issue debentures to the amount of Y.5,000,000 bearing interest at 8 per cent. per annum and a total interest of 9.3 per cent. per annum, to be sold at Y.90 per debenture and will be redeemed after three years.

**MAEBARA INDUSTRIAL OFFICE.**—Partnership company organized for general manufacture of electrical appliances. Office, 9 Itchome Kamazawa-cho, Honjo-ku, Tokyo. Manager, Yoshisabura Maebara.

**HYDRO-ELECTRIC AMALGAMATION, FORMOSA.**—The hydro-electric plant at Dikusui-kai in Formosa belonging to the Tainan Sugar Manufacturing Company, upon which work was commenced in June 1919, is almost completed, and negotiations have been opened by the Taiwan Hydro-Electric Company to take over the plant and increase its capital from Y.6,000,000 to Y.10,000,000 for this purpose. The plant is to have a capacity of 8,700 kilowatts.

**KANSAI ELECTRIC POWER Co., LTD.**—Organized with a capital of Y.12,500,000, one-quarter paid-up, to operate general electrical supply works. Office, 19 Nichome Imabashi, Higashi-ku, Osaka. Director, Yoshizo Ikee.

**ELECTRIC POWER HOUSE FOR HAKONE TUNNEL.**—To facilitate the work on the great Hakone tunnel, a steam turbine generating plant of 3,200 kilowatts capacity is being constructed for the

supply of power. The tunnel is to be five miles in length. It was commenced in August 1919, and by the first of November, 4,300-ft. had been bored from one end and 4,000-ft. from the other. At this rate the tunnel will take another two years to complete.

**TENRYU RIVER HYDRO-ELECTRIC Co., LTD.**—Organized with a capital of \$10,000,000, twenty per cent. paid up, to operate water power grant on Tenryu River. Office, 1 Itchome Yaisu-cho, Kojimachi-ku, Tokyo. Branch, 33 Reijoku Hamamatsu City, Shidzuoka Prefecture. Managing Director, Koji Yenouye.

**MITSUBISHI ELECTRICAL WORKS.**—It is reported that the Electrical Department of the Mitsubishi Shipyard at Kobe will be organized into a separate company and in co-operation with British interests will establish its head office and works at Nagoya.

## WIRELESS

**WIRELESS DIRECTION FINDER FOR HONGKONG.**—It is proposed by the Hongkong government to install a wireless direction finder at Cape Dugalar to assist shipping in the foggy season.

**WIRELESS STATIONS FOR CHINA.**—The ministry of communications is negotiating with an American concern for the establishment of 40 wireless stations in China. The price asked \$3,000,000, is considered too high, but the contract will probably be closed at a reduced rate.—Chinese report.

**PROPOSED WIRELESS, HONGKONG.**—At the British chambers of commerce conference, Mr. Holyeak, of Hongkong, urged the establishment at the earliest possible moment of a powerful wireless station at Hongkong, connecting with India and with Honolulu, and to be available for commercial use in time of peace. He said that the competition from other nations already possessing infinitely more powerful wireless stations has rendered this vitally necessary to the British Empire's trade. He solicited the British legation's assistance to bring about the establishment of such a service.

## TELEPHONES

**NEW TELEPHONE EXCHANGE, PENANG.**—A vote of \$33,260 for the acquisition of land in Burma Road, Penang, for the building of a new telephone exchange, has been approved by the council.

**UNDERGROUND TELEPHONE SYSTEM, NAGOYA.**—The work of laying the underground telephone cables in the city of Nagoya will commence soon and it is expected that it will be completed by March of next year. There will be 27 manhole junctions 15-ft. deep, which are estimated to cost Y.80,000.

**F.M.S. TELEPHONE SCHEME.**—A telephone connection has now been established between Ipoh and Taiping. This is another step towards linking up the larger towns of the Federated Malay States.

**PENANG PHONE SERVICE.**—During 1917, 57 subscribers joined the Penang Exchange and 31 gave up their telephones. At the close of the year there were 699 subscribers and 102 service lines as against 673 and 115, respectively, in 1918. The circuit mileage of these lines was 1,349 miles as against 1,328 in 1918, and the wire mileage 2,483, as against 245 in 1918. The length of underground cable remained at 7 miles 902 yards and

the overhead cable at 715 yards. The profit for the year was \$25,065.80 against \$28,960.20 in 1918. The expenditure on maintenance was \$34,541.00, and the capital expenditure \$26,337.97. The faults at the Central Telephone Exchange, Penang, averaged 15.8 per subscriber of which 55 per cent. were due to line faults, 34 per cent. to instrument faults, and 11 per cent. to switch-board faults.

**PEKING-NANKING-SHANGHAI LONG ROUTE TELEPHONE.**—The plans for establishing a Peking-Nanking-Shanghai long route telephone, formulated by the ministry of communications, has been passed, and the ministry is making preparations for the commencement of the work. The Japanese electricity engineer, specially engaged by the ministry for this purpose, says: "the realization of this scheme will not be later than two or three years. I have been told by the chief of the preliminary commission that the usage of the telephone has already proved to be indispensable in communication, though it is only forty years since this system was first introduced into this country; but this scheme is insignificant in comparison with the vast plans of Europe and America to establish an international telephone system so as to join up the Pacific and Atlantic coasts. China could hardly stand among the family of nations without hurrying her improvements along this line. That is why the Chinese government has so emphatically attended to this and has made preparations for years. It is delightful to know that this scheme is well laid down to-day." He added: "As to the setting-up of this system, we must take the number of telegraphic dispatches as the standard estimating point. In 1918, 4,924 telegrams were dispatched between Peking and Tientsin; 4,050 between Peking and Shanghai; 9688 between Tientsin and Shanghai; 3,805 between Peking and Hankow; and 15,003 between Shanghai and Hankow. If this telephone system is to be set up, the demand for its use must be increased twice or thrice more than that for the telegraph, especially between Peking and Tientsin, Peking and Shanghai and Hankow and Shanghai. Since the electric power consumed on the Peking-Nanking line and the Shanghai-Hankow line must be enormous, it is planned to use No. 8 large copper wire for these two lines, while No. 12 slender copper wire will do quite well for other lines. The cost for setting-up the Peking-Nanking line will be:—

	Yuan.
Material	900,000
Taxes and insurance	25,000
Engineering work	35,000
Total	960,000

and for the Shanghai-Hankow line:—

	Yuan.
Material	1,008,500
Taxes and insurance	35,000
Engineering work	40,000
Total	1,160,000

The total cost for these two lines therefore should be 2,120,000 yuan. The annual revenue, in future, may be expected to amount to 600,000 yuan. If this is so, the net profit will be 500,000 yuan, annually, after deducting 100,000 yuan for maintenance charges.

## PUBLIC WORKS

**MUNICIPAL IMPROVEMENT SCHEME, BOMBAY.**—The Bombay Improvement Trust has been at work for over 20 years, clearing some of the worst slums, improving communications and reclaiming land on



the foreshore of the congested island. A huge housing plan to provide 50,000 new tenements for the workers in the Bombay mills has now been introduced in the legislative council by the governor of Bombay. The cost of the improvements, when completed, will be about £11,000,000.

**EXTENSION OF PENANG GENERAL HOSPITAL.**—A vote of \$100,000 for the extension of and improvements to Penang General Hospital has been proposed.

**AICHI PREFECTURE PUBLIC WORKS.**—The government of Aichi Prefecture, Japan, estimates the sum needed for public works in 1922 at ¥2,900,000 with a supplementary expenditure of ¥140,000 for the construction of the Meitoku bridge and ¥70,000 for the Meiji bridge.

### AIRCRAFT

**CHINESE AEROSTATION LINES.**—The proposal made by the aviation bureau to assign five national aerostation lines, was approved by the Peking government, November 18. The bureau first planned to establish 17 main lines and 8 sub-lines, but has had to start with the 5 most important main lines, owing to the lack of money and trained men. The other main lines will be dealt with when the aeroplanes ordered and the aeronautic instructors arrive.

The starting, ending and interval points of the five main lines are:—

- (1) Peking-Shanghai line :  
Starting point—Peking.  
Ending point—Shanghai.  
Interval points—Tientsin, Tsinan, Hsueh and Nanking.
- (2) Peking-Hankow line :  
Starting point—Peking.  
Ending point—Hankow.  
Interval points—Paoting, Chaka-chong, Chunchow and Chumai.
- (3) Peking-Harbin line :  
Starting point—Peking.  
Ending point—Harbin.  
Interval points—Peitanhu, Chinchow, Fengtien, and Changcheng.
- (4) Peking-Urga line :  
Starting point—Peking.  
Ending point—Urga.  
Interval points—Kalgan, Pongkong and Uran tolui.
- (5) Urga-Koput line :  
Starting point—Urga.  
Ending point—Koput.  
Interval points—Sopuktai and Uliasutai.

The bureau has started to establish storehouses at the above-mentioned places, and aerial communication will soon be commenced.

**NEW TOKYO AVIATION SOCIETY.**—A new aviation club with 19 members has been formed in Tokyo at 4 Sanchoe, Shibaguchi, Shiba. The club manager is Mr. Katsunami Ishibashi. The club is a private one with no connection with the Imperial association.

**HYDROSLIDES FOR YANGTZE.**—The first of a number of hydroslides to be employed on the Yangtze river, has been successfully tested. It was imported in parts from France and set up at Shanghai by the Societe Franco-Chinoise de Constructions Metalliques et Mecaniques.

**JAPANESE ARMY WILL UNIFY AIRCRAFT TYPES.**—The Japanese army aviation department has decided to unify the types of aeroplanes used according to the duty for which they are required, such as reconnoitering, battle planes, or surveying.

Since the disaster at Tokorozawa Aviation Ground the value of the Nakajima type of aeroplane has been questioned, but the cause of the disaster is not altogether to be attributed to defects of the machine, but to the inexperience of the aviator with that type of machine. The types of motor, however, will be limited to certain makes in the future.

**AERONAUTIC EXPERT FOR JAPAN.**—The Imperial University will employ a foreign expert as instructor in the newly created department of aeronautics. This decision was made with some difficulty, because the authorities some time ago voted against the employment of foreign teachers, but owing to progress of aeronautics in other countries it became absolutely necessary for Japan to avail herself of the foreign expert service.

**NATIONAL AERONAUTICAL LABORATORY, JAPAN.**—An agreement has been reached between the Japanese army and navy departments to establish a National Aeronautical Laboratory on a very large scale at an estimated cost of a million yen. The Institution will be placed under the joint control of the Military, Naval and Civil aviation representatives, and its exclusive duty will be to make investigations concerning the engines and material required for the construction of aeroplanes.

**FREIGHT BY AIRPLANE, PHILIPPINES.**—The largest airplane shipment of commercial supplies ever carried in the Philippines was dispatched recently from Paranaque, near Manila, to Cape Stotsenberg, about 60 miles north. Five airplanes, manned by army flyers were used to transport the shipment, which consisted of a large supply of photographic materials for the use of the military post. During the floods which cut off communication with Fort Stotsenberg this year, airplanes were used to carry food to the garrison.

**AVIATORS WANTED FOR FENGTIEN.**—Since the fall of the Anhui Party twelve aeroplanes have been transported from Peking to Fengtien, where, owing to the lack of aviators, these machines have been lying idle although they are urgently needed for service in Mongolia where Chinese troops are operating. At the urgent request of the Peking government, the Fengtien authorities have called for the services of aviators, each of whom will receive a salary of \$200 per month should he be able to handle the machine. It is reported that should he fail to obtain Chinese, foreign aviators will be employed.

**AVIATION IN BURMA.**—Interest in the recent publicity that has been given in Burma to commercial aviation was evidenced by the placing of orders for modern two-seated aeroplanes of considerable range and power with a new company just formed.

**NEW AVIATION SCHOOLS, JAPAN.**—A school of aviation is to be opened at Kajima in Guma Prefecture, Japan, by Lieutenant Mizuta, a well-known aviator of the Nakajima Aeroplane Manufactory. He is to be assisted by seven experts.

**AVIATION SCHOOLS, JAPAN.**—The branch military aviation school at Akino Aviation Field in Miye Prefecture has been opened. Another military aviation school provided for under the last appropriation passed by the Diet will be located at Shitsu in Chiba prefecture during the coming year.

**HYDROPLANE FACTORY, JAPAN.**—The Aichi Watch and Electrical Instrument Company, Ltd., of Nagoya, is constructing at their branch works at Yobitsugi-cho, Nagoya, a new type hydroplane for the government. Lt. M. Kaiya is supervising

the work with 70 workmen, and when completed, will carry out the tests and trial flights.

### BRIDGES

**NEW STATION BRIDGE.**—The Japanese Railway Department will erect a new steel passenger bridge at the Oimachi Station near Shinagawa to cost ¥100,000.

**NEW BRIDGE, TOKYO.**—About the first of next year, the city government will commence construction of the new Shohei Bridge in Kanda-ku. Its cost will be \$250,000.

**NEW STEEL BRIDGE, AICHI.**—Aichi Prefecture has decided to replace the temporary bridge at Hamana Lake with a permanent steel structure to cost ¥28,000.

### BUILDINGS

**KOBE-NUNOBIKI LAND COMPANY, LTD.**—This company has been organized with a capital of ¥5,000,000, shares ¥50, paid-up \$12.50, to construct buildings and conduct a general real estate business. Head office, 25 Itchome, Aioi-cho, Kobe. Managing Director, Mr. R. Nakayama.

**NEW FOREIGN HOTEL AND PALACES PLANNED FOR TOKYO.**—At a recent meeting of the Genro in Tokyo, which discussed the expenses of the Imperial Household, it is reported that the Elder Statesmen were in favor of erecting a magnificent hotel on the site of the former powder magazine in Meguro for the purpose of entertaining distinguished foreign guests, and provide the financing of the Japanese buildings for H.I.H. the Crown Prince, of palaces for T.I.H. Prince Atsu, Prince Asaka and Prince Higashi Kuni.

**TWO NEW HOSPITALS, JAPAN.**—The Tokyo electric bureau will build a sanatorium for its employees at a cost of from ¥500,000 to ¥600,000.

**FOUNDATION COMPANY OF NEW YORK TO ENTER CHINA.**—The Foundation Company of New York has decided to enter the China field on a large scale. Experts are now on the way to commence operations.

**INDUSTRIAL CLUB, TOKYO.**—The fine Industrial Club erected in front of the Tokyo Central Station at a cost of \$400,000, over the original estimate of ¥1,100,000, has been completed. The opening ceremonies were held, November 25.

**SUMITOMO HOSPITAL.**—The Sumitomo family in Osaka is now building a big hospital for the benefit of the workmen in the employ of the many factories under its management and their families. The plan was drawn up last year, and the work of construction has been in progress since summer at Kishima-cho, Nishiku, at an estimated cost of ¥500,000. It is expected that the new hospital will be completed early next year. Dr. Katayama, who has for many years been connected with the Hyogo Prefectural Hospital, will be appointed president of the hospital.

**T. P. RAILWAY BUILDING HOTELS AT CHUFU AND TAISHAN.**—Upon the instruction of Mr. Hsu Shih-tsang, director of the Tientsin-Pukow Railway, who is concurrently vice-minister of communications, two railway hotels with up-to-date conveniences are being built near the station at Chufu, the birth and burial place of Confucius and Taishan, one of the most sacred mountains in China. The grounds to be occupied by these hotels are very exclusive and the surroundings are exceed-



ingly pleasant. The hotels will be ready for occupation by next spring. If they prove successful, similar hotels will be built in other places along the various government lines in the provinces.

**WOOSUNG DEVELOPMENT PLANS.**—Chang Chien, the Nantunghow industrial magnate, has telegraphed the Peking government that he will try his best to fulfil the duties of director of the Woosung Development Board. The Board will not be opened for three months, as the research work must first be done.

**GOLF COURSE AT KARUIZAWA.**—The work of clearing a tract of ground for the new Karuizawa golf course has commenced. The course is expected to be completed about June, and will be an up-to-date one.

**JAPANESE LEPROSITY HOSPITALS.**—The government is contemplating the establishment of five large leprosy hospitals at a cost of ten million yen. It is estimated that there are over ten thousand lepers to be cared for.

**CHEAP THEATRES FOR JAPAN.**—It is proposed, by the department of home affairs to establish cinemas and theatres in all the cities and towns of Japan, for the general public's pleasure. The entrance fees charged will be very small.

**PROPOSED METALLURGICAL RESEARCH INSTITUTE.**—The establishment of a metallurgical research institute at Sakchi or Jamshedpur, is being considered by the government of India.

**NEW ASAHI HOME.**—The new building of the Tokyo *Asahi Shimbun*, which has been in course of construction since the beginning of the year, has been completed. The *Asahi* office will shortly be removed to the new building, which is situated next door to the old building.

**TELEGRAPH BUILDING, TOKYO.**—The Japanese ministry of communications hopes to complete the new five-storyed building for the Central Toyo Telegraph Office, now in Yodobashi, near the Central Telephone Exchange in Marunouchi by 1924 at a cost of Y.3,600,000.

**NEW LECTURE HALL, KYOTO.**—The Kyoto Imperial University has commenced the construction of a new two-story steel concrete lecture hall to cost \$750,000. The lecture room will seat 2,000 or twice as many as the hall at the Tokyo Imperial University.

**NEW SCHOOLS, OSAKA.**—Osaka-fu will construct three middle and two girls' schools. The former will be located on the outskirts of the city and the latter in the central district.

**KYOTO EXHIBITION PROJECTS.**—At a meeting of the officials of the Kyoto Chamber of Commerce, which was held on November 8, the project was unanimously approved of the holding of an international industrial exhibition in Kyoto in 1923 at an estimated cost of Y.50,000,000. It is said that the project has already obtained the sympathetic consideration of the business men in the leading commercial cities. Another plan for holding a domestic industrial exhibition on a smaller scale is receiving the earnest attention of the Kyoto business men concerned. Their idea is to hold it next summer in Okazaki Park. A temporary office to transact business relating to the latter plan has been provided in the local Chamber of Commerce.

**NEW OFFICE BUILDING, TOKYO.**—Plans have been perfected for erecting the long-talked-of office building in front of the Tokyo Station. The George A. Fuller Company will erect the building

for the Mitsubishi Company. It is to be built of reinforced concrete all throughout and will have ten stories. The ground floor will be laid out in the fashion of a Western Department Store, divided into many retail shops. When completed, the building will take its name from the locality in which it is situated and will be called the "Marunouchi Building."

**FRENCH UNIVERSITY, PEKING.**—According to the *Excelsior*, the practical results of M. Painlevé's visit to China, are:—(1) The inclusion in the Chinese budget of a grant of 100,000 francs for the Institut des Hautes Etudes Chinoises in Paris. (2) The creation of a French University in a great centre in China, probably Peking, with an annual grant of 500,000 francs from the Chinese government, provided the French government contributes an equal amount. (3) The reproduction of the Chinese classics. (4) The development of the Chinese University organization in Lyons, with an annual grant of 150,000 francs from South China.

**STATE WAREHOUSE AID.**—The Department of Commerce and Agriculture is encouraging by the aid of a subsidy the purchase of land for the erection of agricultural warehouses throughout the country. At the end of September the number of such warehouses was 1,965 covering 6,525,880 *tsubo*.

**NEW SANATORIUM, TOKYO.**—The Tokyo Municipal Tramway Company will erect a large sanatorium at an expense of Y.300,000.

**NEW SCIENTIFIC MUSEUM, TOKYO.**—The Department of Education will ask for an appropriation of Y.1,500,000 in the next budget for the erection of a three-story stone museum building in Ueno Park.

**NEW LIBRARY, KOBE.**—A new public library building of reinforced concrete two-stories high will be erected in Kobe. This building will be devoted to the reading rooms, offices, etc., while another five-story book store-house will be erected nearby. The cost is estimated at Y.200,000.

**NEW STOCK EXCHANGE BUILDING, KOBE.**—Work has been started on the new stock exchange building at Hirano in Kobe. The main building will be a domed affair covering 2,500 *tsubo* inside a compound with an area of 5,200 *tsubo*. Offices of exchange members, brokers, officials, etc., will surround the main building. The cost of the edifice is estimated at Y.1,200,000. The Exchange recently increased its capital from Y.2,000,000 to Y.3,500,000 in order to cover the expense. It is expected that the building will be completed by January 1922, and will be one of the most up-to-date and best equipped establishments of its kind in Asia.

**ASANO COMPANY BUILDS SCHOOL.**—The Ogura plant of the Asano Steel Works opened a training school for their workmen in April, and has now decided to construct five new buildings covering 300 square yards, for similar educational work and training.

**NEW HOTEL, TAKARADZUKA.**—Messrs. Naoteru Kataoka, Nunichiro Noda, Shigemasa, Sunada, Koshitaro Kusaka, Sozo Nishikawa, Harasaburo Chikuma, Sho Watanabe, Fusajiro Kashima and Kenkichi Kotera, all Osaka millionaires, are interested in the building of a foreign hotel in Takarazuka, a pleasure resort near Osaka. The capital proposed is Y.1,000,000. A Committee of seven has been fully empowered by the promoters.

**LIBRARY BUILDING, TOKYO.**—The Tokyo Com-

mercial University will construct a library hall estimated to cost Y.200,000, to be completed by March 1921.

**NEW OFFICE BUILDING, NAGOYA.**—The Nagoya Electric Tramway Company will erect a three-story office building.

**HOSPITAL FINISHED.**—The opening ceremonies of the Keio University hospital were held on November 6. The six buildings contain accommodations for 200 patients each.

**AGRICULTURAL INSTITUTE.**—The Sanryu Company of Okozaki City, Aichi prefecture, is planning to found a Silk Experimental and Agricultural Institute in that city to cost Y.210,000.

**JOZO TEMPLE, TOKYO.**—The reconstruction of this celebrated temple located in Shiba Park, under way since 1913, is rapidly nearing completion. The total cost will exceed Y.2,000,000. It is entirely in the old Japanese style, is 140-ft. long by 126-ft. wide. The materials are all Japanese wood, some of the uprights being 50-ft. high.

**NEW SCHOOLS, KAGOSHIMA.**—The municipal estimate for new school buildings for 1921, is Y.400,000.

**AMUSEMENT PALACES, TOKYO.**—A plan is proposed to erect a huge entertainment palace at Asakusa Park, and a company is being organized for this purpose with a capital of Y.3,000,000. The plans call for a steel structure covering an area of 270 *tsubo*, with four floors. The first floor will be given over to general stalls and refreshment booths, the second to dining rooms, the third to entertainments, theatricals, moving pictures, etc., and the fourth to a roof garden. The City is also planning other new recreation centres in Shiba, Ueno, and Ryogoku, in which similar entertainment palaces will be erected.

**SCIENTIFIC LABORATORY, TOKYO.**—Dr. Kanda, Professor of the Tokyo Imperial University, assisted by several others, has decided to establish an organization for scientific research, to be placed under purely popular management. The Institution will be named the People's Scientific Laboratory, and will be established with a capital of some Y.10,000,000 which will be mostly raised by means of public contributions. The plan is meeting with the enthusiastic support of the leading representatives of the popular interests, and is expected to assume a definite shape in the near future.

**CENTRAL LAND RECLAMATION COMPANY, KOBE.**—The organization of Central Land Reclamation Company, with a capital of Y.30,000,000, is again to be promoted by Viscount Shibasawa and other business men of influence. The capital of the proposed company will be written down to Y.7,500,000, which sum will be taken up by the promoters only.

**Y.M.C.A. BUILDING, SHANGHAI.**—The *China Press* publishes the details of an American scheme to erect a Y.M.C.A. building in Shanghai, at a cost of Tls. 625,000. The proposed building is to be a seven-storeyed one of the latest style. It will contain 250 bedrooms for foreign young men. It is proposed to secure Tls. 400,000 locally by a Bond Issue, and it is hoped that the remainder will be contributed from America.

**Y.M.C.A. BUILDING, HONGKONG.**—Negotiations have been concluded by which the military authorities dispose of the site opposite the navy yard at

(Continued on page 700).



# SOUTH MANCHURIA RAILWAY

## SHAKAKO RAILWAY WORKSHOPS



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LARGEST AND MOST COMPLETE IN ALL MANCHURIA AND CHINA

AREA OF LAND: About 300,000 Tsubo. OFFICES & WORKSHOPS, 14,000 Tsubo

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THE EAST IS EAST AND THE WEST IS WEST



# SOUTH MANCHURIA RAILWAY

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### ANZAN IRON & STEEL WORKS

New Enterprise Set Up Like Magic  
Amidst the Wilderness of Manchuria.

TRACT OF LAND: about 4,000,000 tsubo.

BLAST FURNACE No. 1 (with a capacity  
for about 350 tons per day)  
Opened to service on April 29, 1919.

BLAST FURNACE No. 2 (with a capacity  
for about 350 tons per day)  
Made ready for service on February 24, 1920.

MEANS OF TRANSPORTATION in the  
plant: 24 miles of railway and 2.5 miles  
of electric tramway in operation, with  
three light locomotives and a number of  
slag-, coke, and ore-cars of from 8 to 24  
tons.

A NEW TOWN SITE of 400,000 tsubo,  
with the necessary roads and water and  
sewage services, laid out and rented to  
lessees.

OFFICIALS AND EMPLOYEES: 2,300  
Japanese and Chinese.

**BUT THE TWAIN HAS MET AND BLENDED HERE**



(Continued from page 697).

present used as store-rooms by the army service corps, for a new European Y.M.C.A. building. The scheme involves the expenditure of \$250,000.

**STATE HOSPITALS, TOKYO.**—The authorities are proposing to establish hospitals for the exclusive use of state employees and their families. The first step in this direction will be the erection of a police hospital, at an estimated cost of Y.600,000. The number of police officers and their families, living in Tokyo, are estimated at 40,000. The building which will be a three-storyed one, will be completed next year. The railway authorities are also reported to be considering a similar scheme in the interest of the employees on the railways, while the department of communications and the educational department also propose to follow the example of the police department. Medical practitioners, according to the *Nichi Nichi*—are opposed to these plans, which the former think will deal a severe blow to their interests, and they are reported to be considering means to combat the government schemes.

**NEW LIBRARIES, OSAKA.**—The City of Osaka will erect four public libraries in the coming year at a cost of Y.140,000 each. Two of these are nearing completion and the plans of the others are approved and work will be started as soon as the ground is purchased.

**HANKOW ICE WORKS.**—The Hankow Ice Works have purchased a piece of land in the vicinity of their present premises, and will erect thereon a large up-to-date factory for the production of mineral waters. During the next year, also, the Ice Works will be reconstructed and the plant considerably enlarged. A motor truck distribution service will also be inaugurated. After the New Year the firm will be known as the Hankow Ice and Aerated Works.

**PROPOSED MEIJI HALL.**—The Meiji Shrine officials propose the erection of a three-story steel concrete hall on the grounds of the shrine to cost Y.1,000,000.

**ISE SHRINE RECONSTRUCTION.**—The home department is planning to reconstruct the national Ise Shrine at an expense of Y.10,000,000 spread over a period of ten years, the expenses for the next year being estimated at Y.2,500,000. The Main Shrine and thirteen other smaller shrines and buildings are to be rebuilt and the bridge over the Uji River will be replaced with a modern structure. The reconstruction of these shrines is estimated to give employment to over 1,000 carpenters.

**TOKYO COMMERCE AND INDUSTRIAL ENCOURAGEMENT HALL.**—This is to cost Y.1,000,000. It is under construction in the grounds of the Tokyo prerectural office. The industrial chemistry hall in the same grounds is expected to be completed by December. The latter institution is to make industrial analyses and assays for commercial companies.

## TRAMWAYS

**TOKYO BELT RAILWAY.**—Mr. Sohachi Wakao, Teijiro Yamamoto and five associates have organized the Tokyo Railway Company, Ltd., with a capital of Y.27,000,000 and applied for the franchise to construct and operate a belt railway around the city of Tokyo. Their plan contemplates operating the passenger service by electricity and steam power for the freight. The first line will start from Shinagawa through Oi, Hiatsuku, Nakano, Arai, Ayase, Fukagawa to Kyobashi and return to Shinagawa.

**MIKAWA TRAMWAY COMPANY, LTD.**—This com-

pany has completed its Koromo line and will extend the Asuke line and at the same time extend to Ohama Bay where a harbor will be constructed.

**MUNICIPALIZATION AND EXTENSION OF YOKOHAMA TRAMWAYS.**—The municipality of Yokohama will buy the stock of the tramway company and pay the present market rate of 68½ per share. The par value of the shares is 90, making the value of the properties Y.6,800,000. The property will be turned over to the city in November. The right of eminent domain will be exercised to secure the right of way for new lines. It is proposed to make many improvements to the rolling stock and add several new type cars, larger than the present ones. The Honmoku line will be extended to Yawatabashi and from there along the beach to Kanazawa. The Toba line will be extended to Hodogaya and several new lines built in the city proper.

**PROPOSED MONO-RAIL ELECTRIC TRAMWAY, TOKYO.**—The plan to build a mono-rail electric tramway over the rivers and canals of Tokyo, proposes to run cars at a speed of about 25 miles per hour, to accommodate 50 persons.

**CHANGE TO ELECTRIC POWER.**—The Yenshu Tramway Company, Ltd., at their last general meeting held in the Hamatsu Chamber of Commerce on October 13, decided to change from steam to electric power.

**SHANGHAI (FOREIGN SETTLEMENT) TRAMWAYS.**—The following is the Traffic Return of the Shanghai Tramways (Foreign Settlement) for the month of October, 1920, and for 10 months ended 31st October, 1920, with figures for the corresponding periods last year:—

	October, 1920.
Gross Receipts	\$232,029.07
Loss by currency depreciation	63,124.71
Effective Receipts	Mex.\$168,904.30
Percentage of loss by currency depreciation	28.54
Car Miles run	428,524
Passengers Carried	10,425,105

	10 Months ended 31st October, 1920.
Gross Receipts	\$2,044,110.97
Loss by currency depreciation	538,536.78
Effective Receipts	Mex.\$1,505,574.19

	10 Months ended 31st October, 1919.
Gross Receipts	\$201,572.61
Loss by currency depreciation	51,432.69
Effective Receipts	Mex.\$150,139.92

	10 Months ended 31st October, 1919.
Gross Receipts	\$1,714,837.82
Loss by currency depreciation	427,094.35
Effective Receipts	Mex.\$1,287,743.47

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Loss by currency depreciation	427,094.35
Effective Receipts	Mex.\$1,287,743.47

**INCREASE TRAMWAY SERVICE, TOKYO.**—The Railway Department has completed its arrangement with the Tokyo Electric Light Company for the supply of power to the amount of 4,000 kilowatts additionally, for use in increasing the electric car services in and around Tokyo. During the present month the electric trains in and around the city will be composed of three or four cars instead of two or three as at present.

**NAGOYA TRAMWAY PURCHASE.**—The purchase by the Nagoya Municipality of the Nagoya Tramway Company was arranged by the payment of Y.12,500,000, to be covered by the issue of debentures.

**BISAI TRAMWAY, LTD.**—This company, operating a steam tramway in Nagoya, has applied for permission to convert their power to electricity. The plans contemplate the construction of 21 miles of new lines.

**NEW TRAMWAY, KOREA.**—The Keishin Electric Tramway Company, Ltd., recently organized in Seoul, proposes to construct a line between Keijo and Shimsen and utilize current generated by a hydro-electric plant at the Kanko River until the end of 1922, when the line will be extended to the Joyo. The freight receipts are estimated to reach Y.900,000 a year.

## WATERWORKS

**HSUCHOWFU PLANS WATERWORKS.**—Mr. McGavin representing the Shanghai waterworks has been surveying Hsuehchowfu with a view to putting in waterworks. The contract is made, the money is deposited in the bank, and work will soon begin. Location of tanks and the choosing of a suitable manager to operate the plant when installed are still undecided questions. The wells and tanks, however, will be located somewhere in the south suburb, with mains running through the principal streets. It is expected that the works will be in operation by March.

**NEW WATERWORKS, TAKASAGO.**—The Mitsubishi paper mill has contributed Y.285,000 towards the construction of a water system for the town of Takasago in Hyogo prefecture, and work will commence in the near future. Owing the location of the Japan Woolen Mills higher up the river and which pollutes the water for paper making purposes, a separate pipe line will be laid.

**TOKYO WATERWORKS PROGRAM.**—The original plan for the construction of the new waterworks system for Tokyo covered a period of 11 years from 1910 to 1921 and an expenditure of Y.20,720,000, but increased costs have compelled a new estimate and appropriations, which calls for Y.47,600,000 and the time extended to 1928. The yearly estimates are: 1922, Y.7,532,000; 1923, 6,125,000; 1924, 2,781,000; 1925, 2,568,000; 1926, 2,448,000; 1927, 2,090,000; 1928, 1,573,000.

## ROADS

**NAGANO ROAD CONSTRUCTION.**—The officials of Nagano Prefecture have invited the department of home affairs to send experts to demonstrate good road construction. Dr. Maki, chief engineer of the department; Mr. Makino; Mr. Agajian, general engineer of the Horne Company, Ltd., and Mr. J. Arima, in charge of construction and assistant sales manager of the same company, expect to spend about a week in the Prefecture, visiting Nagano, Uyeda, Iida and Kamisawa. They will thoroughly demonstrate and explain the construc-



tion of modern hard-surfaced highways, and the use of the latest machinery in this connection. Following the demonstration, it is expected that Nagano will undertake a program of good roads construction.

**NEW ROADS, JAPAN.**—The government will assist the following prefectures to construct new roads during 1921: Shidzuoka, for the Hakone roads, Y.50,000: Miye, Y.60,000: Fuji River Bridge, Y.200,000.

**TUNGCHOW-CHINWANGTAO ROAD.**—It is proposed to construct a highway from Tungchow to Chinwangtao direct thus bringing Peking with 550 li of the coast.

**CHEFOO WEIHSIEN ROAD.**—The Chinese ministry of communications will employ famine sufferers from Shantung to build a motor road along the projected Weihsien-Chefoo railway line, at an estimated cost of 1,500,000 yuan, which will be borrowed from an American firm in Tientsin. The work will continue for half a year. Dr. Hirai, adviser to the communications department, has visited Tsingtau to negotiate with the Japanese authorities for the free transport of the workmen by the Shantung railway.

**ROAD CONFERENCE.**—A road conference was recently held at the home office in which the discussion centered around the immediate construction of the 250 mile military road scheme, the entire cost of which is to be defrayed by the national government. It is expected that as a result of this conference, the highway between Osaka and Kobe will be entirely reconstructed, it being held cheaper to build a new road than to repair and widen the old.

**NEW STREETS, TOKYO.**—The Tokyo municipal authorities will undertake the reconstruction, within the present year, of the streets leading from Nihombashi to Manseibashi, and from Hibiya to Kanda Bashi, a total of 17,000 *trubo*. The expenditure is estimated at 2 million yen, of which Y.1,500,000 will be defrayed out of the Imperial donation of Y.3,000,000 made for the purpose of street reconstruction. The work will be started next month and completed by March next.

**BITUMINOUS LIMESTONE, PHILIPPINES.**—A deposit of bituminous limestone aggregating 24,000,000 tons, and of a high quality for paving purposes, has been discovered in Leyte Province, near Villaba. The only other commercial deposit of this material in the world, it is said, is in the districts near Mons, France and Neuchatel, Switzerland, from which the surfacing of many streets in Paris, New York and London have been obtained. According to an official of an American Company which is interested in developing the deposit, "this bituminous limestone must not be confused with sandstone. Sandstone breaks under a load; this material does not. It contains sufficient mineral oil substance to reduce the dust nuisance on streets and roads paved with it to a minimum. It withstands heavy traffic better than any other known material and can be marketed at a moderate cost. These facts make it the most sought for paving materials."

**AUTOMOBILE ROADS FOR SHANTUNG.**—The Famine Relief Association of Shantung has decided to build a road for automobile traffic from Yuchung, passing Weiming and Wuchung, to Liouchung, a distance of nearly 94 miles. Everything is ready to start the work, but at present there is a dispute as to the termination of the road. The Shantung assemblymen maintain that the road should finish at Linching (making the length only 81 miles), as that city is easily reached so far as com-

munication is concerned, and there are plenty of famine sufferers there.

**AICHI PREFECTURE'S ESTIMATES.**—The Aichi prefectural government has estimated the cost of new roads in the prefecture at Y.47,720,635 in which is included the cost of erecting two steel bridges over the Kiso River. The actual work of construction will not be started until conferences are held with neighboring prefectural heads and the various road scheme coordinated.

**ROAD CONSTRUCTION, TOKYO.**—The municipal street construction bureau will commence immediate construction on the street from Nihonbashi, Suda-cho and Mausei-bashi, a total area of 17,000 *tsubo*, expecting to complete the work by March, 1921. The cost is being defrayed by an Imperial grant of Yen 1,500,000 and Yen 500,000 from the National treasury. The pavement will be asphalted wood blocks set on a concrete foundation.

## MOTORS

**IMPERIAL AUTOMOBILES, JAPAN.**—Rush orders for two special automobiles, for the exclusive use of the Emperor and Empress of Japan, have been placed with the Rolls-Royce Motor Company. Work is being rushed, and the two cars will reach Japan early next year. They will cost approximately Y.75,000 each.

**SHANGHAI FIRE TRUCK.**—A 24 horse-power automobile is the latest acquisition of the Chapei (Shanghai) Fire Brigade. It is of French manufacture.

**NEW JAPANESE AUTOBUS LINE.**—Mr. T. Suzuki, of Yokosuka, and others have applied to the authorities for a permit to operate an autobus line between Henmi, Sano and Yokosuka.

**MORIMURA SHOTEN, LTD.**—This company has been organized with a capital of Yen 1,200,000 all paid up to import and sell automobiles and parts. Office, 6 Itchome Uchisaiwai-cho Kojimachi-ku, Tokyo. Managing Director, Kinji Morimura.

**NEW JAPANESE AUTOMOBILE COMPANY.**—Mr. Bunjiro Nagabe, of Osaka, is organizing a company with Yen 10,000,000 capital to operate a passenger autobus service between Kobe and Osaka and has filed application with the local authorities who have forwarded the papers to Tokyo for decision.

**WAKITA AUTOMOBILE COMPANY.**—Partnership organized to manufacture and repair automobiles. Office, 6 Shiba Park, Shiba-ku, Tokyo. Director, Kanataro Wakita.

**MISHIMA CARRIAGE AND AUTOMOBILE MANUFACTURING COMPANY.**—Partnership organized to manufacture automobile carriages and accessories. Office, 18 Sanchoe Ichigaya, Tamachi, Ushigome, Tokyo. Manager, Ryukichi Mishima.

**AUTOMOBILES, KANAGAWA-KEN.**—Despite the general depression, Kanagawa prefecture reports an increase of 150 new automobile licenses since May.

**NO SHANGHAI-TSINGPU SERVICE.**—The proposal to inaugurate a motor bus service between Shanghai and Tsingpu was defeated at a conference of the gentry of Tsingpu and government representatives. The opposition of the natives was vigorous. None of the promoters attended.

**CORD TIRES IN MONGOLIA.**—Mr. Y. C. Loo, superintendent of motor busses on the passenger service in operation north of Peking to Kalgan across the Gobi Desert, Mongolia, is having all the

cars equipped with cord tires on account of their strength and flexibility.

**TIENTSIN-PAOTINGFU ROAD.**—A road is being made to join up Tientsin with Paotingfu, about 100 miles. The new road to Peking has not yet been started, but the intention is eventually to join up from Tientsin with the Peking road from Tungchow. The distance from Tientsin to Peking will then be 100 miles by road and 89 by rail. There is no prospect yet of the road being metalled. It is only to be of levelled-up earth.

**MOTOR AMBULANCE, IPOH.**—An ambulance built on a Sunbeam chassis, fitted up with the utmost comfort for first-class passengers, has been ordered by the medical department, Ipoh, Straits Settlements.

**SURVEYING CHINESE AUTOMOBILE ROADS.**—The long-conceived plan of the ministry of the interior to build automobile roads, is now to be carried out by famine labor. The first road planned is to be from Chochow (a city lying to the south of Peking) to Tsinan, Shantung, a distance of 500 li, also a road from Kaifeng, Honan, to Tsinan, Shantung, a distance of 700 li. The investigation work is already completed, and Messrs. Kuo Yang-kang and Fan Chu-fong are to make a survey, which it is expected will take two months.

## MINES AND METALS

**JAPAN EXPORTS COPPER TO CHINA.**—The Japan copper merchants guild, recently organized by the Furukawa, Kuhara, Mitsui and other mining concerns has received an order for the supply of about 10,000 piculs (about 600 tons) of Japanese copper from the Chinese military arsenal at Wuchang, the metal being required for coining and the manufacture of ordnance. Negotiations having been settled, the shipments will be commenced after the quantities to be supplied by different concerns are fixed. Following the shipment of 30,000 piculs of copper to Changsha recently supplied by the guild fresh negotiations for the supply of a similar quantity are going on between the guild and the Chinese authorities in Changsha, and are expected to be settled on similar conditions. The lack of customary orders from India this year is ascribed to the depressed financial situation in that country. Orders from Hongkong are also lacking this year.

**COPPER SEAM IN PALAZOZOIC LAYER, JAPAN.**—A copper seam has been discovered in the palazozoic layer in the Ashio Copper Mine, Tochigi prefecture. This discovery is expected to work a revolution in the geological theory hitherto held that there are no copper seams in the palazozoic layer.

**KAILAN SEEKS MINING RIGHTS IN SAGHALIEN?**—Dispatches received in Japan on November 12, from Vladivostok, state that a British company styled the China Company, Limited, who has been operating coal mines at Kailan in China for twenty years, has applied to the Vladivostok government for a mining concession in Northern Saghalien for a period of 60 years. The company requests exemption of customs and other duties for machinery and materials required in mining operations, and export duties on coal produced by the mines: that all land required for buildings, plant, railways and other structures necessary to mining operations be ceded gratis, and that it shall have the privilege of felling all timber necessary for the mines. The Company agrees to pay three per cent. of the gross value of the output to the government and to furnish coal to the government at the market price. The present application, it is claimed, is the resumption of



negotiations initiated between the Company and the former Russian government in 1916.

**NEW SUMITOMO COAL MINE.**—The Sumitomo Mining Company has acquired the Uryu coal mine in Sorachi, in Hokkaido with an area of 6,000,000 *tsubo*.

**GOLD AND COAL ON THE AMUR.**—A British business man has started a mining concern along the Amur. British and American activities are gradually developing along the Amur in general trade, but especially with regard to the working of gold and coal mines.

**VLADIVOSTOK ETHER PRODUCTION.**—An enterprise is being organized in Vladivostok to produce ether, the works to be built in the heart of the timbered regions of the Pacific coast.

**COPPER ORE OF TIMOR.**—Government mining engineers have been exploring Timor and have found some very rich and extensive layers of copper ore which are easily workable.

**NEW PENANG MINING VENTURE.**—The prospectus has been issued in Penang of Kuntang Tin Dredging, Ltd., with a capital of \$500,000. The company has been formed to acquire and work certain tin-bearing lands near the village of Huey Yot, in the province of Trang. Monthon Puket. Mr. E. Jucker, mechanical engineer, Nakou Sritamarat, and Mr. Chan Cheng Tay, miner, Huey Yot, will join the board after allotment. The vendors and promoters are Messrs. Berli & Co., Ltd., of Bangkok, and Mr. Chan Cheng Tay and Chan Hoe Seng of Huey Yot. Messrs. Berli & Co., Ltd., receive \$155,000 in fully paid shares and \$75,000 in cash. Mr. Cheng Tay will receive \$45,000 in fully paid shares. Mr. Chan Hoe Seng has already received \$13,500 in cash from Messrs. Berli & Co., Ltd., and will receive a further \$15,000 in fully paid shares. The number of shares now offered for public subscription is 150,000.

**MATSUMORI WORKS.**—Organized in Osaka for the purpose of manufacturing gold and other metal ornaments. Office, 346 Szumio-machi, Nishi-ku, Osaka. Manager, Kohei Moriyasu.

**JAPAN COAL MINING CO., LTD.**—Organized with a capital of Y.1,750,000, with Y.20 per share paid up, to engage in the mining and sale of coal. Office, 3 Itchome Minaminabi-cho, Kyobashi-ku, Tokyo. Managing Director, K. Akimoto.

**DAIREN MINING COMPANY, LTD.**—Organized with a capital of Y.2,000,000, one-quarter paid-up, to engage in general mining business. Office, 5 Honkawa-cho, Nihonbashi-ku, Tokyo. Managing Director, Kihachiro Okura.

**NEW MINING COMPANY, JAPAN.**—It is proposed to organize the Takarai Coal Mining Company, Ltd., with a capital of Y.1,500,000. The first payments on the shares have been made. The mines are located in Hokkaido.

**JAPANESE COPPER EXPORTS.**—The Copper Guild has secured a contract for 15,000 piculs to Changsha and about 500 tons to North China. Another order for 3,000 tons from North China is now being divided. It is reported that 300 tons of the total has been accepted. Payments will be made on a part cash basis, the remainder being paid on letters of credit.

**JAPANESE MINERAL OUTPUT.**—Official returns show that during the first half of 1920 the following

minerals were produced in Japan:—

	1st Half, 1920	1st Half, 1919	Change Per Cent.
Gold ..	1,033,832 Momme	971,169 Momme	6.5 Inc.
Silver ..	21,263,112 Kin	22,070,156 Kin	3.7 Dec.
Copper ..	56,283,235 Kin	66,854,625 Kin	15.8 "
Lead ..	2,867,573 "	3,385,523 "	15.3 "
Bismuth ..	231 "	290 "	20.3 "
Tin ..	157,117 "	105,637 "	48.7 Inc.
Mercury ..	4,444 "	1,050 "	322.3 "
Zinc ..	2,629,800 Fren. Tons	3,282,998 Fren. Tons	29.9 Dec.
Pig Iron ..	28,365 "	29,587 "	4.1 "
Steel ..	6,173 "	5,111 "	20.8 Inc.
Iron Sulphate ..	12,696,842 Kwamme	9,656,534 Kwamme	31.5 "
Iron Chromate ..	248,926 "	585,431 "	57.5 Dec.
Manganese ..	618,100 "	2,271,774 "	72.8 "
Scheelite ..	35,346 "	143,954 "	75.4 "
Arsenic ..	859,950 Kin	548,755 Kin	56.7 Inc.
Phosphorites ..	53,440 Fren. Tons	63,115 "	15.3 Dec.
Arsenic Ores ..	59,622 Kwamme	117,241 Kwamme	49.2 "
Black Lead ..	742,244 Kin	1,904,125 Kin	61.0 "
Coal ..	15,339,840 Fren. Tons	15,309,413 Fren. Tons	0.2 Inc.
Kerosene Oil:			
Crude Oil ..	961,755 Koku	938,596 Koku	2.5 Inc.
Gas ..	754,958 1,000 S.F.	359,253 1,000 S.F.	110.2 Inc.
Asphalt ..	473,878 Kwamme	560,045 Kwamme	15.4 Dec.
Sulphur ..	22,485 Fren. Tons	21,305 Fren. Tons	5.5 Inc.

During September the output decreased from the amount produced in the same month of 1919, except gold, as may be seen from the following table:—

	Sept., 1920	Sept., 1919	Change Per Cent.
Gold ..	168,178 Momme	156,553 Momme	7.4 Inc.
Silver ..	3,165,429 Kin	3,348,745 Kin	5.5 Dec.
Copper ..	7,675,953 Kin	9,965,655 Kin	23.0 "
Iron ..	3,924 Fren. Tons	6,560 Fren. Tons	40.2 "
Coal ..	1,917,028 "	2,176,907 "	11.9 "
Kerosene Oil ..	148,188 Koku	161,005 Koku	8.0 "
Sulphur ..	2,335 Fren. Tons	4,428 Fren. Tons	46.1 "

**OVERSTOCK OF ASBESTOS IN JAPAN.**—During the war period and the years immediately following the termination of the war, there was a rising demand for asbestos in this country. To meet this demand large orders were placed in Canada and South Africa, and the goods began arriving from about the beginning of this year. Now, the demand has fallen off and the stocks have accumulated and now amount to about 300 tons. Higher prices being quoted in the American market the stockholders have decided to re-export their holdings.

**ZINC INDUSTRY IN JAPAN.**—The zinc refining industry in Japan, although of comparatively recent origin, having been started after the outbreak of the European war, has developed remarkably within rather a brief period. The production in 1915 reached 21,131 tons valued at Y.12,952,000, and was sufficient to cover the demand in this country. Consumption has since steadily increased, especially for military purposes. The difficulty of importing foreign zinc and the high prices have stimulated further development. The height of prosperity was reached in 1917 when twenty one new factories were established and when the combined output amounted to 54,718 tons valued at Y.27,000,000. After that year the demand gradually decreased which has combined with the over-supply of the goods to bring about a depreciation of the market price. The output in 1919 accordingly decreased to 19,816 tons valued at Y.8,145,000. Since then many of the newly started establishments have curtailed operations or closed, and at present only three factories are continuing business. Owing to the fall of the market price and the competition of cheap foreign manufacture the manufacturers are unable to maintain the business because the comparatively high cost of production makes it unremunerative without their own source of supply. The three factories above-mentioned are maintaining the business with materials produced from their own mines. With a view to protecting the industry the Department of Agriculture and Commerce is determined to levy an import duty of about 10

or 15 per cent. *ad valorem* on foreign manufacture.

**THE CHIKUHO MINING CO.**—It has been decided at a meeting of shareholders that the Chikuho Tanko (Mining) Kaisha should combine with the Naigai Shoji Kaisha under the name of the Nichi-Ei Kogyo Kabushiki Kaisha or the Japan-British Industrial Company, which is expected to move actively in the direction of foreign trade. Mr. Raiko Otani, President of the Chikuho Mining Co., will head the new company.

**SWATOW MINERAL RESOURCES.**—Though the mineral production in the district of Swatow has been so far only on a small scale, the resources are apparently considerable, including coal, iron, wolframite, bismuth, tin, manganese, lead, silver, molybdenite, and pyrites. Bismuth was exported in 1919 to the amount of 118,000 pounds, chiefly to Japan. Coal and iron are mined by native methods only, the former being surface coal and inferior in quality. The iron produced is used chiefly in making iron pans.

## COAL

**SOUTH MANCHURIAN COLLIERY OUTPUT.**—The output of the collieries worked by the South Manchurian railroad has for some time past been anything but encouraging, and the company had to import from Japan to fill up the shortage. As the result of increasing the working capacity of the collieries and the gradual industrial development throughout Manchuria which has created a sudden increase in consumption there has been a considerable increase in output since about the beginning of last year. Lately the company has increased the number of miners. Besides meeting the demand of the railway and in other directions the coal is now largely exported to Japan, and other parts of the Asiatic continent. According to the latest statistics compiled by the company the quantity of coal consumed in Manchuria per year is 1,271,493 tons by the company itself, 1,391,695 tons by other concerns and 46,006 tons used by the officials and other employees of the company in Manchuria. The quantity consumed by the shipping department of the company is 43,761 tons by ships and 183,640 tons for other purposes than vessels. The total output was 3,707,304 tons. The remainder was exported to Japan, Chosen, China and elsewhere as follows:

To Manila 52,433 tons; to Makong 10,694 tons; to Shanghai 46,216 tons; to Chefoo 21,417 tons; to Lungkow 150 tons; to Pechili islands 1,069 tons; to Tsingtau 1,666 tons; to Haichow 385 tons; to New Wiju 203,467 tons; to Phengyang 48,123 tons; to Seoul 106,661 tons; to Chemulpo 48,373 tons; to Chinnampo 37,097 tons; to Mokpo 8,708 tons; to Kunsan 81 tons; to Fusan 62,557 tons; to Wonsan 6,036 tons; to Chungchi 1,088 tons; to Yokohama 57,016 tons; to Atsuta 42,485 tons; to Taketoyo 7,009 tons; to Moji 7,960 tons; to Tokuyama 20 tons.

**NEW SHANSI COAL MINING CORPORATION.**—The general manager of the Chinese Engineering and Mining Company of Tientsin has floated a company in London for the development of the natural resources of Shansi province especially in her production of smoke and smokeless coals and it is reported that he is returning to China probably in company with Sir Beilby Alston, British Minister. It is also reported that General Yen Hsi-shan agrees to delimit a certain area for development by the new corporation and then measure its success or failure by results.

**RUSSIAN MINES RESUMING.**—At the Moscow conference of coal, wool and silk industries, President Krandoff of the administration of coal industry in the Donetz Basin declared that out of 1916 mines in the basin 959 have resumed work.



Coal obtained this year reaches four hundred and forty million poods and naphtha oil three hundred and fifty million poods.

**FUEL INVENTION.**—Paymaster Colonel Matsuno-bu, in charge of military godowns in Korea, has invented a smokeless and flameless fuel after three years' hard research. The discovery is said to be of world-wide interest. The new fuel, made of coal, contains alcohol. It is white in color, and its heating capacity is stronger than coal, though its price is about one-half that of charcoal. It will considerably benefit the Japanese Army as well as the Navy, it is said.

## OIL

**KARAFUTO OIL COMPANY.**—Mr. Teijiro Nagata and Seikuro Honda have organized the Karafuto Petroleum Company, Ltd. and applied for the rights to 131 oil sections covering a total area of 1,031,000,000 *tsubo*.

**YOSHIKAWA SHOTEN.**—Partnership registered to engage in general oil and machinery lubricant business at 884 Ichioka-cho, Nishi-ku, Osaka. Manager, Seihachi Wada.

**ANGLO-CHINESE OIL COMPANY.**—An Anglo-Chinese joint enterprise, registered at the ministry of agriculture and commerce as the Chinese Turkestan Petroleum Company, for working the oil-fields in Chinese Turkestan has been approved at a recent meeting of the Peking cabinet. The contracts were made between a British firm, the Fuhkunge and Hsiung Hsiung, the latter representing China. It is reported that the business of the company is making much headway, and that a party of British experts are already prospecting in the Kashgar and Urumchi regions of Chinese Turkestan. The Chinese Turkestan provincial assembly has telegraphed the Peking government that the oil production is very limited and therefore no concession should be granted to foreigners. The assembly asks the government to make a definite statement regarding the proposed enterprise.

**KOKUSAN OIL AND GREASE MANUFACTURING CO., LTD.**—This company was recently organized to carry on the manufacture of grease, and machinery lubricants. Office, 3858 Nishinomiya-machi, Hiogo Prefecture. Managing Director, Kiyashi Otani.

**AMALGAMATION OF OIL COMPANIES.**—There are rumors of an amalgamation between the two biggest kerosene oil companies in Japan, namely, the Hoden Oil Company and the Japan Oil Company. In this connection, Mr. Tsushita, Managing Director of the Hoden company, says that he and his colleagues support the plan in principle.

**JAPANESE OIL CONSUMPTION.**—An official investigation shows that during 1919 the oil consumed in Japan amounted to 205,929 *koku* of volatile oil, 1,076,539 *koku* of lamp oil, 610,000 *koku* of light oil, 461,306 *koku* of lubricating oil and 195,000 *koku* of heavy oil. The light and heavy oils were entirely produced in Japan, and of the other oils, the Japanese products were 73 per cent. for volatile oil, 24 per cent. for lamp oil and 87 per cent. for lubricating oil. As compared with 1918 the above percentage increased by 1 per cent. and 9 per cent. for volatile oil and lubricating oil respectively and decreased 13 per cent. for lamp oil.

**PETROLEUM IN BORNEO.**—Not long ago, the Kubara Mining Company secured from England the rights to search for and exploit petroleum fields in the whole of Northern Borneo. Careful investigations have been carried on since then and it is now reported that a promising field has been discovered in the northern part of the island. It is

also reported that the company has already begun boring. The result of this attempt is awaited with much interest as this is the first time that Japanese capitalists have attempted to work foreign petroleum fields.

**YIELD OF JAPANESE CRUDE OIL.**—For the first half, 1920, the output of crude oil in Japan aggregated 961,755 *koku*. The following table gives the details:—

District.	1st Half, 1920 <i>Koku</i>	1st Half, 1919 <i>Koku</i>
Hokkaido ...	4,013	2,968
Akita ...	427,512	370,222
Yamagata ...	30	—
Niigata ...	529,503	591,101
Shidzuoka ...	630	671
Nagano ...	67	98
Total ...	961,755	965,060

**NEW JAPANESE OIL FIELDS NECESSARY.**—The Japanese Navy is much exercised over the supply of heavy oil, which is required in increased quantities for the "eight-eight" fleet program. The fuel investigation committee of the Seiyu Party has a report from the naval authorities that the government should ask for an appropriation for prospecting oil fields in Japan, her territories and other places in her sphere of influence in the next session of the Imperial Diet; that, under the supervision of the navy, private oil companies should carry on the work with a subsidy equivalent to half the outlay involved; and that the new oil concessions should be acquired by the government at a reasonable price. The Diet is expected to sanction the appropriation.

**ASAHI OIL COMPANY.**—Partnership formed for the manufacture of special oils. Office, Adachi-machi, Higashi nari-gun, Osaka.

**HODEN PETROLEUM Co.**—At a general meeting on October 27, the following disposal of profits for the current term was passed:—

Net profit ...	Y.4,629,403
Brought Forward ...	3,700,873
Total ...	8,330,277
Reserve ...	500,000
Bonus ...	130,000
Employees' Benefit Fund ...	100,000
Ordinary Dividend (20 per cent. per annum) ...	1,748,500
Extraordinary Dividend (20 per cent. per annum) ...	1,748,500
Carried Forward ...	4,003,277

**OIL IN SAGHALIEN.**—Next to fishery and timber, oil promises to develop as an important industry of Saghalien. Since the occupation of the southern half of the island by Japan great efforts have been made in the exploitation of oil-fields and development of the industry. As the result of prospecting the existence of a rich oil-field extending for a length of nearly seventy miles has been discovered and according to the experts, the quality is excellent and the flow almost inexhaustible. Messrs. T. Nagata and S. Honda have recently applied to the Department of Agriculture and Commerce for a lease covering an area of 131,000,000 *tsubo* with a view to organizing a large joint stock company to exploit the oil industry in the district. This is the first instance of a big private oil enterprise in Karafuto and the establishment of the company is expected to contribute to the future development of the industry in the island together with the similar enterprise started by the Hokushinkai some time ago in Northern Saghalien.

**OIL SUBSIDIES, JAPAN.**—The oil question in Japan having assumed national importance, it is likely that the working and prospecting of oil mines will be partly carried on by the government and not left to private concerns. With this end

in view, a state subsidy may be given to oil companies for prospecting purposes.

**OIL, SAGHALIEN.**—The Japan-Russia Trading Company has obtained the right to prospect oil fields in the hinterland of Alexandrovsk, Siberia.

**JAPANESE PETROLEUM SOCIETY.**—The Japanese petroleum interests have agreed to create a society for the development of the industry under the name of the Nippon Sekiyu Kyokai or the Japan Petroleum Society. It is considered in general that this portends the establishment of a well-sinking subsidy system.

**NEW PHILIPPINE OIL LAW.**—The New Philippine oil law, now in force, contains the following provisions: Section 1. All public lands containing petroleum or other mineral oils and gas, on which no patent at the date this Act takes effect has been issued, are hereby withdrawn from sale and are declared to be free and open to exploration, location and lease by citizens of the Philippine Islands or of the United States and by associations and corporations wholly composed of citizens of the Philippine Islands or of the United States or both; *Provided, however,* That parties having heretofore filed claims for any lands containing said minerals shall be given preference to lease their respective claims, provided they file a petition to that effect within six months from the date of the approval of this Act. Section 2. All such lands may be leased by the Secretary of Agriculture and Natural Resources in the manner and subject to the rules prescribed by the Council of State; said lease shall be in blocks or tracts of not more than four hundred hectares for each individual, and not more than twelve hundred hectares for any association or corporation: *Provided, however,* That at the discretion of the Secretary of Agriculture and Natural Resources, more than one lease may be granted to any one person, association, or corporation. Section 3. Leases under the provisions of this Act shall be for a period of not more than five years each, subject to renewal on such terms and conditions as may be authorized by the Council of State, and no such lease shall be assigned or sublet except with the consent of the Secretary of Agriculture and Natural Resources, and in this case, only to such persons or associations of persons and corporations as have the qualifications required of lessees. Section 4. The exploration and exploitation of deposits of petroleum and other mineral oils and gas located in private lands shall be made only by persons, associations, or corporations having the qualifications required of lessees and under such terms and conditions as may be prescribed by the Secretary of Agriculture and Natural Resources and approved by the Council of State.

## HARBORS AND DOCKS.

**TO MAKE HAICHOW "FINEST HARBOR IN CHINA."**—The first members of a party of Dutch and Belgian engineers who will set to work to complete the Lung-hai trunk railway and carry out a plan "to make Haichow the finest harbor in China," have arrived at the future Kiangsu coast terminal and set to work. The harbor improvements are estimated to cost about \$6,000,000.

**SAN MEN BAY SCHEME.**—A conference of Overseas Chinese met in Hangchow, November 20, where they considered plans for a self-governing port and district at and around San Men Bay, and adjourned to reconvene in Shanghai. Thirty-seven delegates attended. The United States, Canada, Hawaii, the Philippines, Australia, and the Straits Settlements being represented. San Men Bay is situated south of Ningpo and next to Tsingtau is said to be the finest natural harbor on the China coast. It is proposed to develop this



harbor and its hinterland as a purely Chinese enterprise. Considerable capital and a good deal of patriotic sentiment support the project.

**PRAI RIVER DOCK.**—The negotiations between the Straits Settlements and Federated Malay States governments for the building of the new Graving Dock at Prai River have been concluded and the Federated Malay States government have agreed to build the dock. It is hoped that the ferry service between Penang, Bagan Luar and Prai will soon be taken over by the Federated Malay States Railways and that an efficient service of steamers with proper piers and landing facilities will be provided in the near future.

**SEATTLE'S FRESH WATER DOCK.**—The first and only fresh water ocean terminal in the world is claimed by the Lake Union Dock Company of Seattle, Wash., which has established a big terminal on Lake Union, that is reached by vessels through the Lake Washington locks and canal at the entrance of Salmon bay. The Lake Union Dock Company covers an area of 46,000 square feet with a covered warehouse of a capacity of 6,000 tons.

**SOURABAYA HARBOR IMPROVEMENTS.**—Sourabaya Harbor, Java, is to be further deepened to permit ships of 29 feet 6 inches draft, when fully loaded, to enter and leave at high water. Present facilities include a quay 4,000 feet long and 656 feet wide, dredging an inner harbor of 247 acres. The roadstead is one of the best in the islands, and approximately 3,000,000 register tons of cargo are dealt with annually.

**BUNDING—S.M.R.**—The Yeiko Bay bunding will be about 2,500 feet long and it is expected to complete 700 feet by the end of this year at an expense of Y.70,000.

**HARBOR IMPROVEMENTS, HYOGO PREFECTURE.**—Hyogo Prefecture, one of the most prosperous in Japan, has approved the plan, for the improvement of its ports. Amagasaki, on the sea-side of the western suburb of Osaka, will be improved at a cost of Y.1,750,000. The present harbor covers an area of 37½ acres, and it is proposed to increase it to 166½ acres. The work will extend over several years. Three quays, each 1,200 feet long, and another of 1,500 feet, will be built and the mouth of the harbor widened to 300 feet. The new harbor will be 6 to 13 feet deep at low tide. The present harbor accommodates 985,175 tons (gross) of ships a year, a handling import and export cargo to the amount 1,141,894 tons. By the plan the accommodation will be largely increased. Nishinomiya and Imazu, two adjoining rural ports between Osaka and Kobe, will be combined into a large new harbor at a cost of Y.890,000. The two ports now cover an area of 19 acres. This will be increased to 83 acres, of which Nishiyama will occupy 66½ acres. About 9 acres of sea will be reclaimed for the purposes of warehouses, landing places, etc. One large bow-shaped breakwater 3,000 feet long with two entrances 180 feet wide each will be constructed. The present yearly capacity of the two ports is 309,800 tons of shipping and 366,392 tons of cargo. The harbor of Mikage, a seaside town famous for its sake situated near Kobe will be improved at a cost of Y.1,800,000. The new harbor will be 8 feet deep at low tide, and cover more than 29 acres. Eight acres of sea will be reclaimed, of which 3½ acres will be used for a landing-place. Two breakwaters 900 feet long each will be constructed, besides two harbors with entrances 180 feet wide. The present capacity of the harbor is 113,050 tons of shipping. The port of Gunka, a rural town with a population of 3,500, on the western coast of Awaji island in the Inland Sea, will be improved at a cost of Y.605,000, of which Y.290,700 will be used for the construction of a quay, and Y.57,000 for a

breakwater. The present capacity of the port is 223,201 tons of ships with cargo amounting to 13,108 tons. Murotsu, a sheltered harbor on the western coast of Awaji island, with a population of 3,400, will be made into a regular port at a cost of Y.405,000, with large piers, landing places and other new arrangements. Futami, Taki, in Harima Province, and many other ports, in the prefecture are receiving the attention of the authorities. In the case of Taki, for instance, a proposal is made to improve its present harbor to accommodate a steamer of 5,000 to 6,000 tons.

**COCHIN HARBOR IMPROVEMENTS.**—The Cochin Harbor Committee has adopted the report of the Sub-Committee appointed to formulate proposals in connection with jetties and warehouses. The jetties will be extended about 1,000 feet to the south of the new Custom House, the old Custom House coming within this extension, which will be connected with the railway line from Ernakulam, through Vandurithy and Palurithy. The total expenditure estimated for the whole scheme is Rs. 2½ crores. The Port Trust to be created will be represented by the British government, the Cochin Durbar and the Cochin Chamber of Commerce. The chairman will be appointed by the Madras government. One of the proposals includes the construction of a light railway connecting Cochin with Alleppey.

**IMPROVEMENTS TO FUSAN HARBOR.**—The harbor of Fusan, Korea, is proving inadequate to meet the growing trade, and a plan is now under consideration to build a breakwater 1,800 yards long, and to extend the existing piers by 800 yards, also to reclaim and dredge the land near by. The scheme will take six years to complete, and the cost is estimated at over Y.9,000,000.

**SI-LIEN ISLAND TO BE OPENED AS A COMMERCIAL PORT.**—On November 18, the Kiangsu citizens submitted a petition to the Peking government requesting the opening of Si-lien Island, Haichow, as a commercial port.

**NEW PIER, MANILA.**—Permission having been obtained from the Philippine government, the Pacific Mail Steamship Company are going to build a large private pier, four times larger than any pier at Manila at the present time.

**GENTENG BAY HARBOR WORKS.**—The harbor works built by the government at Genteng Bay, India, are nearing completion. Steamers are already calling regularly at the new pier.

## SHIPBUILDING

**U. S. BUILDING TRANSPORT FOR PHILIPPINE RUN.**—The new army Transport *St. Mihiel* is expected to make her first voyage in the Pacific early next year. She is being built at Hog Island near Philadelphia for the Philippine run. The dimensions of the new ship is: Length between perpendiculars, 443-ft.; beam 58-ft. draft when loaded 28-ft. 3-4 inches. She is equipped with 6,000 horsepower marine geared turbines. The *St. Mihiel* made an average speed of 16.76 knots an hour on a recent trial trip.

**AIRCRAFT MOTHER SHIP, JAPAN.**—The Japanese navy department will construct an aircraft mother ship to be called the *Hosho* of 15,000 tons, capable of housing 3 hydroplanes.

**SAN FRANCISCO SHIPYARDS BUSY.**—Great activity is shown in all the San Francisco Bay shipbuilding plants. Several tankers and freighters are nearing completion.

**NEW TORPEDO BOAT.**—The *Aoi* of 350 tons

was launched at the Kawasaki Yards on October 9.

**NAVAL APPROPRIATIONS, 1922.**—According to the *Hochi* the Japanese Navy Department will ask for more than Y.500,000,000 next year, of which Y.170,000,000 is for maintenance and not less than Y.340,000,000 for extensions.

**NEW SUBMARINE LAUNCHING, JAPAN.**—Submarine No. 24 was launched on October 14 at the Kure Navy Yard and is expected to be in commission by May of next year.

**DESTROYER LAUNCHED AT KAWASAKI YARD.**—The launching of the destroyer *Kiku* No. 2 took place at Kawasaki Dockyard at Kobe recently. The *Kiku* is 850 tons, 290 feet long.

**NEW BATTLESHIPS, JAPAN.**—The new battleships *Nagato* and *Mutsu*, built at Yokosuka and Kure are being mounted with armaments, and will be ready to go into commission next month. Following the completion of the *Nagato*, the keel of the new battle-cruiser *Akagi* is to be laid at the Kure navy yard next December. The *Akagi* will be a sister ship of the superdreadnought *Amagi* to be built at the Yokosuka yard.

**KAWASAKI DOCKYARD COMPANY.**—At its general meeting on October 28 declared a dividend of 20 per cent. per annum for the current term.

**WARSHIPS AUTHORIZED.**—Construction of two battleships and two cruisers has been authorized. The two battleships are the *Kii* and the *Owari*, both of 43,500 tons each, and the two cruisers are the *Abukuma* and the *Kinu*, both of 5,500 tons each. These ships belong to those to be built under the new naval extension program. It is understood that the battleship *Kii* will be built at the Kure Naval Shipyard, the battleship *Owari* at the Yokosuka Naval Shipyard, the cruiser *Abukuma* at the Uraga Dockyard, and the cruiser *Kinu* at the Kawasaki Dockyard. They are all to be completed by 1924 or 1925.

**NEW T. K. K. CARGO-BOAT.**—The *Reiyo Maru*, a cargo-boat of 5,500 tons gross, built for the Toyo Kisen Kaisha, was launched from the Asano yard at Tsurumi on November 7. The *Reiyo Maru* is the second of five cargo-boats to be constructed for the Company.

**SEPTEMBER LAUNCHINGS, JAPAN.**—Steamers of 1,000 gross tons and over launched in Japan during September, numbered 7 with a total tonnage amounting to 29,380.

**SHIPBUILDING PROTECTION, JAPAN.**—The Sub-Committee of the Temporary Financial and Economic Investigation Society of the government has decided to adopt a policy for the encouragement and protection of the Japanese shipbuilding industry. This policy includes the abolition of the duty on the import of shipbuilding materials. There is, however, considerable opposition to the proposal, based on the opinion that the shipbuilding yards alone will benefit. It is said that the abolition of the import duty will still keep the price of the ships much higher than that of ships constructed in England and America in view of the freights and insurance premiums paid in connection with such imports. A policy should be adopted for the protection of shipping circles in general, and among the many questions to be considered that of the duty on the purchase or import of foreign ships is very important. According to the present law, ships of under 10 years old, when imported, are charged Y.15 per gross ton and those of over 11 years old Y.10 per ton. The latter duty is too low and therefore must be increased, to check the increase in the number of old ships and at the same time improve the demand



for newer vessels (to be constructed in Japanese dockyards).

**UCHIDA SHIPYARD LAUNCHING.**—The new steamer *Hamburg Maru*, built at the Uchida Shipyards for the Osaka Shosen Kaisha, has been launched. She is 400 feet long, 52½ feet beam and has a draft of 30 feet. The contract speed is 12 knots and her engines will generate 3,800 horse power. She is of 3,500 deadweight tons.

**JAPANESE SHIPYARDS DECREASE.**—During the latter days of the war shipyards in Japan numbered 145, but have now decreased to 22, owing to depression in marine circles. It is reported that investigations for the purchase of small shipbuilding yard by the larger concerns, have been started.

**NEW DESTROYER, JAPAN.**—The cruiser type torpedo-destroyer *Shiokaze*, has been launched from the Maizuru Naval Station.

**HAMADA SHIPBUILDING COMPANY.**—Organized as a partnership for general shipbuilding and repair work. Office: 16 Sancho-me Shintsukuda-jima, Kyobashi-ku, Tokyo. Representative, Buhei Hamada.

## SHIPS

**NEW PACIFIC LINERS.**—The first of the new 535-foot United States Shipping Board passenger liners to be operated by the Pacific Mail Steamship Company between San Francisco and Manila (fully described in THE FAR EASTERN REVIEW for September, 1920) will sail for the Far East on March 19 and is due at Shanghai on April 11, according to a cablegram received by Mr. B. C. Haile, traffic manager for the Pacific Mail. The new liner is the *Golden State* and, according to the schedule announced, is to sail from Shanghai for Japan ports, Honolulu and San Francisco on April 28. It will make the homeward trip from Shanghai to America in 19 days. The trip out will be made in 22 days. Nineteen of the liners are nearing completion and all have been allotted to the Pacific service.

**NEW JAPANESE COASTWISE LINE.**—The Hokuriku Steamship Company has been organized with a capital of ¥300,000 to inaugurate a new service in the Japan sea, the line extending to Vladivostok, Northern Chosen and Dairen. The company will have its head office in Toyama and branches at Fushiki, Vladivostok, Chyonjin (north Korea) and Dairen. The promoters of the new enterprise include the Osaka Shosen Kaisha, Toyo Shipping Company, North Japan Steamship Company and a few influential business men of Toyama.

**MOTOR AMBULANCE BOAT, PERAK.**—The medical department, Perak, Straits Settlements, is to have a motor ambulance boat for service on the Perak River.

**NEW KOBE SHIPPING CONCERN.**—The Tsuda Company, Ltd. has been organized with a capital of ¥500,000, quarter paid up, to engage in general shipping business. Office, Sancho-me Kaigan dori, Kobe. Managing Director, Shiro Tsuda.

**BOSTON-ORIENT LINE.**—A steamship line between Boston and the Far East will be opened by the Dollar Steamship Lines, Ltd. The cargo boat *Hwah Jah*, one of the German steamers taken over by the Chinese government during the war, and operated for them by the Dollar Steamship Lines, Ltd. will be put on this run.

**NEGOTIATIONS FOR JAPANESE STEAMERS.**—Negotiations are being conducted by the Inter-Ocean

Trading Company, for the charter of two or three Japanese steamers.

**NEW STEAMER LINE TO SOUTH CHINA.**—The Nisshin Kisen Kaisha (Japan-China steamship company), is going to open subsidized service along the coast of South China. The subsidy lasts until June 30, 1923. The new line starts from Shanghai and terminates at Canton, the ports of call being Amoy, Swatow and Hongkong. The service will be maintained regularly three times a month. The company is building two new steamers for the use of the line.

**INCREASED TARIFF.**—The Japanese department of communications has granted the application filed by the N.Y.K. and T.K.K. for the increase or revision of the freight tariff on the North American Line (Pacific coast and inland from Japan). The revised rates, which are enforced from November 1, are as follows: (1) From Japan to North American Pacific coast. Articles, rates for which are unchanged: hats, hemp braids, lacquer ware, raw silk yarns, silk textile fabrics, matches, rice, etc. Articles, rates for which have been lowered: Paper lanterns, parasols, glass ware and glass manufactures, blankets, etc. Articles, rates for which have been increased: canned goods (17 per cent. increase), cotton cloth (12 per cent. increase), toys (18 per cent. increase), provisions (12.5 per cent. increase), lily bulbs (12.2 per cent. increase), fancy mattings (5 per cent. increase), sundry goods (11 per cent. increase), etc. (2) From Japan to North America inland. Articles, rates for which are unchanged: Hats, peanuts, seeds, raw silk yarns, rice, silk textile fabrics, sundry goods, etc. Articles, rates for which have been lowered: Paper lanterns, oils, mandarin oranges, woodworks and twenty other kinds. Articles, rates for which have been increased: Canned goods (61 per cent. increase), cotton cloth (46 per cent. increase), toys (33 per cent. increase), provisions (22 per cent. increase), lily bulbs (22 per cent. increase), fancy mattings (50 per cent. increase), etc.

**65,000 TONS OF SHIPPING IDLE.**—According to the latest investigations, the number of steamers lying idle at the principal ports in Japan on October 21 was 58 with a combined tonnage of over 65,000 tons, the figure representing only those steamers exceeding 500 tons in tonnage. The largest percentage is represented by Osaka where 39 vessels with a combined tonnage of 39,772 tons were idle, Kobe following with 6 vessels aggregating 12,752 tons. Nagasaki reported 4 vessels of 5,984 tons, Yokohama 4 vessels of 3,423 tons, Nagoya 2 vessels of 1,604 tons, Moji 2 vessels of 1,245 tons, and Hakodate 1 wooden vessel of 529 tons. More detailed figures are as follows:

Kinds	No of Vessels	Tonnage Tons
Wooden vessels of over 500 tons	24	26,590
Vessels of over 500 tons but less than 10,000 tons	12	9,715
Vessels of over 10,000 tons	12	29,004
Total	58	65,309

Besides the above there were lying idle 1,245 tons of shipping at the port of Moji, 1,704 tons at the port of Nagoya and 529 tons at the port of Hakodate.

**ALL-INDIA STEAMBOAT COMPANY.**—To engage in cargo service between Indian coast and foreign ports, the All-India Steamship Company has been registered in Bombay.

**T.K.K. TO CALL AT DAIREN.**—The importance of the American-Manchurian trade is seen in the decision of the T.K.K. to have its trans-Pacific liners call at Dairen on the return trip after leaving Shanghai. This stop will increase the trans-

pacific trip about seven days and the number of voyages will be decreased from 25 to 21 per year. The company has applied to the government for permission and the new schedule will be put into effect immediately.

**NEW JAPANESE SUBSIDIZED LINES.**—The Japanese minister of communications has issued orders to open the following steamer services as subsidized lines:

(1) Osaka Shosen Kaisha. South American (Eastern coast) line. Between Kobe and Buenos Aires. Six steamers to run 10 voyages a year.

(2) Toyo Kisen Kaisha. South American (western coast) line. Between Yokohama and Valparaiso. Six steamers to run 12 voyages a year.

(3) Osaka Shosen Kaisha. Java-Bangkok line. Between Sourabaya and Bangkok. Two steamers to run over 20 voyages a year.

(4) Nisshin Kisen Kaisha. South China coast line. Between Shanghai and Canton. Three steamers to run over 36 voyages a year.

(5) Chosen Yusen Kaisha. Chosen western coast line. Between Yokohama and Chemulpo. Two steamers to run over 26 voyages a year.

**UPPER YANGTZE TRADE.**—Shanghai, November 4. The s.s. *Shutung* and *Shutung Flat*, built especially for the work by Messrs. J. I. Thomeycroft in 1909 for a syndicate of Chungking and Chengtu merchants and officials known as the Szechuan Steam Navigation Company, and the first really successful vessels on the Upper Yangtze, are to take their flag to a part of the Yangtze where it has never before been seen. They will trade between Suifu—250 miles from Chungking—and Chungking, and it is hoped that the enterprise shown by Messrs. Mackenzie & Co., Ltd., owners of the *Shutung*, will meet with success.

**THE JAPANESE SHIPPING COMBINE.**—The question of a Japanese shipping combine is making progress among the steamship companies concerned. The O.S.K.'s directors, who were first reported to be little interested in the proposal, seem to have held private conferences since President Hori came back to Japan, and to have made up their minds concerning the question, and a few directors of the Kokusai Kisen Kaisha have intimated the possibility of a settlement before long.

**COMMONWEALTH GOVERNMENT LINE.**—The Australian government mercantile fleet at present comprises 23 vessels, and 16 ex-enemy vessels. New ships are now being built in England and Australia. The net profits for 1919-20 will probably be £220,000, somewhat less than last year owing to the maritime strike. Since June 1919, 588,829 tons of cargo have been carried between Australia and Great Britain by these steamers.

**NEW CANADA-JAVA STEAMSHIP LINE.**—A new steamship line to ply between Montreal, Port Said, Port Sudan, Aden, Bombay, Colombo, Singapore, Batavia and other Java ports is being organized by the Ellerman Lines, Ltd. on much the same lines as that of the Ellerman Bucknall American-Indian Line. While a few steamers will have accommodation for a limited number of passengers, the greater part will be cargo steamers, and will run monthly.

**BIG NEW U. S. STEAMSHIP LINE.**—The American-Hawaiian Steamship Co. and the Shawmut Steamship Co. are to be combined into a new corporation to be known as the United American Line. It is estimated that this union will have 51 steamships with a combined tonnage of 468,902 tons.

**SINGAPORE SHIPPING.**—The tonnage of merchant vessels entered and cleared at Singapore during the first-half year of 1920, shows an increase of



nearly 1½ million as compared with the corresponding period of 1919, but we have not yet reached the pre-war figures of 1914. There is a noticeable increase in American tonnage, which has about trebled for the first half-year of 1920, as compared with the corresponding period of 1919. No American vessels appeared in the 1914 returns.

### NAVIGATION.

**NATIONALIZATION OF NAVIGATION ADMINISTRATION OF SUNGARI, AMUR, USURI AND NUN RIVERS.**—It was urged at a meeting of the shareholders of Wu Tung & Co. that the administration of navigation of Sungari, Amur, Usuri and Nun rivers in Manchuria should be brought under the control of the central government at Peking.

**MAY HAVE PACIFIC OCEAN SEA LANES.**—Owing to the increased number of steamers crossing the Pacific both by the northern route and to San Francisco via Honolulu it is now proposed to have each steamship company map out a well defined lane which will be followed by its vessels both east and west bound and to furnish this information to other companies. This is done on the Atlantic and is considered a help in reducing the chances for accidents at sea. Recently a big passenger liner, on a voyage from the Pacific Coast to Yokohama, met nine vessels during the trip. There is always a possibility of collision under existing circumstances. If each company has a definite route to follow which is known by all shipping men travel will be safer. Several of the large steamship companies have approved of the scheme and have reported the route followed by their ships. Others have reported favorably and are now taking the matter up with their head offices.

**YANGTZE RIVER ENTRANCE CHANGED.**—The western entrance to Pitman-King Channel, Yangtze River, by way of Pitman-King Crossing, was abandoned October 10, and a new entrance opened to navigation, named Cooper Bank Crossing. In consequence of these changes in the channels, the following alterations have been made in aids to navigation. A light-beacon, known as South Light Beacon, has been established at the right bank of the river, 1.93 miles N. 50½° W. from the beacon on Kiushan Quoin, to mark a point where vessels alter course when navigating the southern approach to Cooper Bank Crossing. This light beacon is painted white, carries a black disc at its middle height, and two white unclassified lights hoisted vertically and six feet apart. A light boat, known as the Cooper Bank Crossing Light Boat, is moored in 23 feet of water on the southern side of Cooper Bank Crossing, in a position from which the beacon on Kiushan Quoin bears S. 45½ E., distant 3.34 miles. This light boat exhibits a seventh order fixed white light. The Big Tree Light Boat has been moved and now marks the fairway in the northern approach to Cooper Bank Crossings. It is moored in 37 feet of water and from the light boat, Big Tree Beacon bears N. 81½ W., distant 1.32 miles. The Crossing Light Boat and Spit Buoy which hitherto marked Pitman-King Crossing have been discontinued. Cooper Bank Crossing should be navigated with caution owing to the strong cross sets of the tides and its liability to rapid change.

### INDUSTRIES

**ORIENTAL WOODEN BLOCK CO., LTD.**—Organized with a capital of Y.100,000, one-quarter paid-up, for the manufacture and sale of wooden paving blocks and general lumber and saw mill business.

Offices, 13 Shimomaki-cho Nihonbashi-ku, Tokyo. Managing Director, Tatsuo Kawase.

**CANNING PLANT AT ULLIS BAY.**—The erection of a large canning plant at Ullis Bay, Vladivostok, is announced by the East Siberian Fishermen Corporation.

**MIKUMI SHOTEN.**—A partnership under this style was recently organized for dealing in machinery, machine tools, etc. Office, 68 Honzaimoku-cho, Nihonbashi-ku, Tokyo. Representative, Koichi Hara.

**FIBER MANUFACTURING COMPANY.**—A company under this name was organized on September 20, for the manufacture of fibrous materials. Office, 40 Itchome Kikugawa-cho, Honjo-ku, Tokyo. Managing Director, Sakutaro Onizuka.

**SUGAR COMBINE.**—Amalgamation has been arranged between the Tainan Sugar and Miyako Sugar Companies. The latter company is to be purchased and incorporated into the former company which will thus come to possess Y.20,250,000 capital.

**YAMATO MATCH COMPANY, LTD.**—This concern was recently organized to engage in the manufacture of matches and general trade. Office, Sancho-me Kasumo-dori, Kobe. Manager, Tozo Murakami.

**ROLLING MILL.**—The Minowa Rolling Mill Company has been formed as a partnership with offices at 345 Minowa, Minami Senju, Tokyo-fu. Manager, Shirobei Horiyone.

**NIPPON SHOJI COMPANY.**—This company has been organized for general lumber business. Office, 21 Nichome Nakano-shima, Kita-ku, Osaka.

**KAIBARA SHOJI COMPANY.**—Firm organized for the sale of machine tools and machinery. Office, 123 Itchome Sonezaki-naka, Kita-ku, Osaka. Manager, Y. Ishikawa.

**YASUDA GUMI.**—A company organized for general construction and contracting work. Offices, 293 Shikanjiwa-cho, Nishi-ku, Osaka. Manager, Tohei Yasuda.

**COTTON MILL COMBINE.**—The Nisshin Cotton Spinning Co., Ltd. will purchase the plant of the Okazaki Cotton Spinning Co., Ltd. (capital Y.3,000,000). The capital of the new company will be increased to Y.10,000,000.

**NEW ARTIFICIAL FERTILIZER COMPANY.**—The Imperial Ayosai Artificial Fertilizer Company Limited, has been organized with a capital of Y.500,000, one-quarter paid-up. Office, 1235 Mikawashima, Kita Toyoshima-gun, Tokyo-fu. Managing Director, Senji Kasahara.

**PRINTING MACHINERY.**—The Japan Printing Industry Company, Ltd., has been organized with a capital of Y.300,000 quarter paid up, for importation and sale of printing machinery, etc., and general printing business. Office, 10 Shiusezomachi, Shiba, Tokyo. Managing Director, Kynichi Shibata.

**THE MEIJI SUGAR COMPANY.**—This firm has declared a dividend of 62.4 per cent. per annum for the term.

**IMPERIAL NAIL MANUFACTURING COMPANY.**—The Teikoku Seitei Kaisha, or the Imperial Nail Manufacturing Company, of Nishinoda, Osaka, which was established with a capital of Y.1,000,000

during the business boom, was sold at auction on November 12.

**PAPER MILL REBUILT.**—The Shimizu paper mill recently destroyed by fire, is to be reconstructed at a cost of Y.140,000.

**CHEMICALS COMBINE.**—Five large American chemical companies have combined under the name of the Allied Chemical and Dye Corporation with a capital of \$65,000,000. The present amalgamation was made to cope with the growing European competition, and to get over certain present difficulties. Meanwhile, Japanese manufactures are far inferior to foreign imports in quality and less attractive in price. The *Asahi*, pointing out this drawback, urges the necessity of some drastic measures being taken at once.

**IMITSU COTTON MANUFACTURING CO., LTD.**—Organized recently for the manufacture and sale of cotton. Capital: Yen 300,000, one-quarter paid up. Office, Ukami, Imatsu-mura, Hyogo Prefecture. Managing Director, Bunjiro Osabe.

**THE JAPANESE WATCH AND CLOCK INDUSTRY.**—In 1919 there were in Japan 22 watch and clock factories, employing 3,621 workmen and producing 1,219,060 watches and clocks representing a value of Y.3,950,468. As compared with 1918 the number of factories has increased by 3, the number of workmen by 782 and the output by 73,912 pieces, or 3.4 per cent. in quantity and Y.1,451,431, or 58 per cent. in value during 1919 the output was in the direction of more expensive articles, which fact combined with the advance in prices accounts for the increase in yearly value.

**TAIWAN SUGAR DIVIDENDS.**—The Taiwan Sugar Manufacturing Company held its semi-annual meeting October 28, in Tokyo, when dividends at 50 per cent. per annum were declared, including bonuses.

**CELLULOID COMBINE.**—The Naniwa, Toyo Koku-sai, and other celluloid companies in Osaka has been planning a huge combine of all the Japanese manufacturers, but little hope is held out for its success.

**WOOLLEN MILL COMBINE.**—Nine big woollen manufacturers in Japan met at the Imperial Hotel in Tokyo on October and organized a general Japan Woollen Association. Mr. Inahata, in an address, stated that there were 40 woollen manufacturers in Japan with an aggregate capitalization of Y.190,000,000.

**NEW PAPER MANUFACTURING COMPANY.**—The Nanjo Shoten, Limited has been organized with a capital of Y.1,000,000, par value of shares Y.50. paid up, Y.25, for the purpose of manufacturing paper. Head Office, 6 Kita Naka-cho, Kobe. Managing Director, Sobei Nanjo.

**NEW COTTON MILL.**—The Itoju Shoten, Limited, has been organized with a capital of Y.300,000, half paid up, for the purpose of manufacturing cotton cloth, etc. Head Office, Honmachi, Nagoya. Managing Director, Jubei Sofuye.

**WOODEN PIPE FACTORY.**—The Matsuki Wooden Pipe Manufacturing Company, has been organized for the manufacture of wooden pipe and accessories at Nakaku-ku, Nagoya. Manager, Gore Itow.

**TOA PRODUCTION COMPANY, LTD.**—This concern has been organized with a capital of Y.2,500,000, one-quarter paid-up, to conduct a general colonization freight forwarding and development business.



Offices: 16 Kuneme-cho, Kyobashi-ku, Tokyo. Managing Director, I. Nakamura.

**NEW LUMBER COMPANY.**—The Tokai Lumber Company, Ltd. has been organized with a capital of Y.35,000 to operate lumber mill and sell products (with one-quarter paid-up). Its head office is at No. 1 Itchome, Suidobata, Koishikawa, Tokyo. Managing Director, T. Yasui.

**NEW RICE MILL.**—The Nagoya Rice Company, Ltd., has been organized with a capital of Y.200,000, one-quarter paid-up, for the purpose of engaging in rice milling and incidental business. Office, 52 Itchome, Uramonzen-cho, Nagoya. Managing Director, Y. Mizuno.

**TAKASHIMA TRADING CO., LTD.**—This firm has been organized with a capital of Y.5,000,000, one-quarter paid up, for general trading and investment business. Office, 2 Kotohira-cho, Shida-ku, Tokyo. Managing Director, K. Takashima.

**JAPAN LUMBER COMPANY, LTD.**—This company was organized recently with a capital of Y.7,000,000, one-quarter paid up, to operate lumber mills, exploit forests and sell lumber. Offices, 3 Suihiro-cho, Kanda-ku, Tokyo. Managing Director, T. Mafugi.

**MACHINE TOOL COMPANY.**—The Yanazawa Shoten, a partnership under the direction of Mr. S. Yanazawa was established on September 10, at 22 Idagashi, Kojimachi-ku, Tokyo, for the sale of machinery, machine tools, metals and coal.

**PAPER FROM BAMBOO.**—The great wood-pulp manufacturers are inclined to laugh at the idea of serious competition from bamboo pulp. Bamboo pulp mills are, however, at the present moment a very real actuality, says the British Weekly. One is now working in Trinidad, another in Tonkin, from which bamboo pulp has been shipped to France on a profitable basis, and it is said that large bamboo pulp factories are being erected near Calcutta and in Burmah. The supply of bamboo pulp, supplemented by Savannah grasses, is inexhaustible. The schemes at present in hand provide for the production of something in the neighborhood of 100,000 tons of bamboo pulp per annum.

**COMBINATION OF DYE STUFF WORKS.**—The plan to combine all sulphur black dye stuff manufacturers in Japan is making steady headway. These factories number 18, whose paid-up capital amounts to Y.4,000,000 and whose business and other rights are estimated at the value of Y.2,000,000, making the total of Y.6,000,000, which will form the paid-up capital of the proposed combination.

**HASONUMA GOLD INDUSTRY CO., LTD.**—Organized with a capital of Y.1,000,000, two-thirds paid-up, to engage in the manufacture and sale of gold and other metal work. Office, 1 Suihiro-cho, Shitaya-ku, Tokyo. Managing Director, Asashiro Hosonuma.

**NEW EXPLOSIVE MILL, JAPAN.**—The Teikoku Explosive Industry Company at a recent meeting of shareholders decided to carry all profits of the last six months forward to next term. The Company's mill at Chita, Aichi prefecture, will be completed this year.

**WUHU COTTON MILLS.**—The cotton mills of Anhwei have been very active recently. The Yu Ching Mill has been working day and night in order to enlarge production, but is still far from meeting the demand. It is reported by the Cotton Yarn Trade Guild that the import of raw cotton in the Chinese ninth moon (Oct. 12-Nov. 10) was

2,524 parcels, an increase of 1,116 parcels over what was imported in the eighth moon.

**CRAPPE MANUFACTURE, WUCHOW.**—The manufacture of crappe is a very prosperous industry in Wuchow, Chekiang. The Li Sung Crappe Manufactory, established by Mr. King Li-sung with his own capital, has been doing very well the last few years and is now adding to the building and machinery on an extensive scale. This has led many wealthy persons of neighboring towns as, Song-ling, Nan-shing, Linghu and Yuen-Ka-Wei take up this industry, with the result that crappe-making machines are rising in price, one formerly costing 100 yuan is now 240 yuan.—*Sin Wan Pao.*

**NAMTAI SHOJI (TRADING) CO., LTD.**—Organized with capital of Y.100,000, one-quarter paid-up, to engage in general import, export, and construction business. Office, Uchisaiwai-cho, Kojimachi-ku, Tokyo. Managing Director, S. Tsuda.

**YOKOO SHOTEN.**—Partnership formed for general machinery manufacture and sale. Office, 7 Yoshio-ka-cho, Honjo, Tokyo. Manager, T. Yokodo.

**TOKON CIGARETTE MACHINERY CO., LTD.**—Organized with a capital of Y.50,000, one-half paid-up, to manufacture the Tokon cigarette machine (Patent No. 31,429). Office, 4 Itchome Minami Nabe-cho, Kyobashi-ku, Tokyo. Managing Director, N. Nakayama.

**MAGNESIUM CEMENT COMPANY.**—Partnership formed for manufacturing magnesium cement. Office, 12 Tansu-cho, Ushigome, Tokyo. Manager, T. Oura.

**SINGAPORE RUBBER INDUSTRIAL CO., LTD.**—Organized with a capital of Y.1,500,000, one-quarter paid-up, for operating rubber works. Office, 13 Minami Kinroku-cho, Kyobashi-ku, Tokyo. Managing Director, K. Hayashi.

**TOMOYE INDUSTRIAL OFFICE, LTD.**—Organized with a capital of \$50,000, one-quarter paid-up, to engage in general construction and contracting work. Office, 22 Sanchome Nishiki-cho, Kanda-ku, Tokyo. Managing Director, K. Yamagishi.

**COAL BRIQUETTE MACHINE, OSAKA.**—The Osaka arsenal has been making trials of the "Holveck" coal brick machine and, according to the officer having the work in charge, a reduction of 23 per cent. can be made in the consumption of coal. The cost of the machine is Y.70,000.

**S. SAIKI SHOTEN.**—Partnership organized to engage in general machinery and machine tool business. Office, 11 Itchome Minami-Horii, Nishi-ku, Osaka. Manager, Sutejiro Saiki.

**MITSUBISHI ENGINEERING WORKS.**—The Mitsubishi Shipyard at Kobe has been operating an engineering and electrical department for the manufacture of machinery and electrical apparatus. At a meeting held in October, it was decided to separate the engineering department from the main works and organize it into a separate company with a capital of Y.5,000,000 and transfer the head office and works to other properties in Nagoya. The electrical department has also under consideration a plan to operate independently in co-operation with a British company and establish its head office and works at Nagoya.

**JAPANESE SULPHUR FOR CHINA.**—One hundred and fifty tons of sulphur ordered by Chekiang province from Japan are (November 10) on the way to Shanghai by a Japanese steamer. On arrival here it will be unloaded and transported to Chekiang. Out of the total amount, 120 tons go to Hangchow, 20 tons to Wunchow and 10 tons to Taichow, Che-

kiang. By a passport specially granted by the tuchuan of Chekiang, it is exempted from Inland Transit Dues along the way.—*Sin Wan Pao.*

**SMOKELESS FUEL DISCOVERY.**—A discovery that is expected to revolutionize the manufacturing industry is reported from Seoul. This is a smokeless fuel that gives out stronger heat in combustion than coal, and is only about one-half the price of charcoal.—*Chinese Exchange.*

**MATCH FACTORY AT BLAGOVESTCHENSK.**—A large factory for the manufacture of matches has been opened at Blagovestchensk by the Amur financial and economic council.

**NIPPON GLAZED TILE CO., LTD.**—Registered with a capital of Y.1,000,000 one-quarter paid-up to engage in the manufacture and sale of tiles, earthenware pipes and construction material. Office, 1 Itchome, Imagawakoji Kanda-ku, Tokyo. Managing Director, Teitaro Chiba.

**CLOTH FACTORY FOR SHANGHAI.**—Seeing that native-made cloth may have a very large demand next year, on account of the loss of millions of dollars by the Shanghai piece goods merchants because of the drop in exchange, Mr. Yih and Mr. Kwin, two Shanghai merchants, have decided to establish a native cloth manufactory. Expert technologists have been engaged, and extensive varieties of cloth are to be woven. It is expected that in time the market will extend as far as Nanyang Islands, North China, and various inland places. Several other merchants are also thinking of promoting this enterprise.—*Sin Wan Pao.*

**PROPOSED NEW FACTORY LAWS.**—The Chinese ministries of foreign affairs, communications, interior and agriculture have been jointly investigating the recent disaster at Tongshan, with a view to introducing factory laws for the protection of workmen. It is understood that the government is demanding \$1,000 as compensation for the relatives of each man killed by the explosion.

**AMERICAN "KNOCK-DOWN" HOUSES.**—An American firm, specializing in "cut-to-order houses," has an order for nine such houses for Tokyo, Japan. They have already shipped one of the largest and most expensive houses to a physician in that city.

**TWO NEW EXCHANGES TO BE ESTABLISHED IN SHANGHAI.**—Shanghai cotton merchants are promoting a cotton exchange. It has been decided to have it situated at the same place as the cotton merchants guild for mutual convenience. A new stock, cereals and lace exchange is also to be established by Mr. Chen Zung-long, Pao-Yu-chien, and other Shanghai merchants.

**DAI NIPPON FORESTRY AND LUMBER MILLS, LTD.**—Organized in October with a capital of Y.1,000,000 fully paid up to conduct general lumbering and saw-mill business. Office, 5 Sanchome, Saiwai-cho, Nishi-ku, Osaka. Managing Director, Kojiro Terada.

**SUMIYASHI COTTON SPINNING CO., LTD.**—Registered with a capital of Y.200,000, one-quarter paid up, to operate cotton spinning mills. Office, 173 Sumiyashi-mura, Higashi Nari-gun, Osaka. Managing Director, T. Kinko.

**TSURUHASHI RUBBER CO., LTD.**—Organized with a capital of Y.250,000 fully paid up for operating general rubber works. Office, Tsuruhashi-machi, Nishinari-gun, Osaka-fu. Managing Director, Hisakichi Maruska.

**OGAWA IRON WORKS.**—Organized in October to conduct general foundry and machine shop at 128



Kamino-machi, Sangenya, Nishi-ku, Osaka. Manager, T. Ogawa.

**JAPAN'S WOOLLEN CLOTH INDUSTRY.**—The aggregate capital of all the manufacturing companies, except official factories, now amounts to Y.120,000,000, the paid-up capital amounting to Y.8,500,000. The annual output of woollen cloth by the manufacturing companies, both official and private, reaches 11,000,000 yards, while the output of mousseline amounts to 300,000 piculs. Quite recently an association called the Yomo Kogyo-kai (Woollen Cloth Industry Development Association) was organized in Tokyo for the purpose of developing the industry. The new Association is now planning the amalgamation of factories, large and small, as a first step in the realization of its project. The following table shows the annual output of woollen cloth by the principal private factories in the country after the war:—

	Yards.
Nippon Woollen Cloth Factory	12,000
Tokyo Woollen Cloth Factory	8,400
Mousseline and Spinning Co.	34,800
Tokyo Mousseline Co.	10,650
Jomo Mousseline Co.	6,306
Toyo Mousseline Co.	11,750

**MARKET FOR SELVEDGE MACHINES IN AUSTRALIA.** There should be a good sale for selvedge machines on the Australian market, reports Consul-General Sammons, as the manufacture of all classes of knitted goods and hosiery is being considerably extended, in order to meet an increased demand for Australian goods.

**THE MEAT INDUSTRY OF NEW SOUTH WALES.**—The meat industry of New South Wales has attained considerable importance, 13 establishments and 1,200 persons being engaged in connection with meat preserving in 1918. Consul Norton reports that during that year approximately 26,000,000 pounds of meats were exported from the State, principally rabbits and mutton, and over 21,000,000 pounds of tinned meats, poultry, and game.

**INVESTIGATING MARKET FOR THIN PONGEE.**—A letter has been received from the American Silk Trade Association, requesting Chinese merchants to weave a kind of very thin pongee, and enclosing a sample of same. Mr. Ting Ju-ling, chief of the Chinese delegation to the International Silk Exposition, has been instructed to investigate the making of this pongee, to engage technologists, and to purchase a machine in America.—*Sin Wan Pao.*

**A HOT PROPOSITION.**—One of our Japanese translators turns us in the following: "In Tokyo there are five crematories, but it is not enough for present citizens, and there are now the plan among high class people like Sub-General Yoshida and Baron Nawa to establish hydro-crematories which is first plan in Japan, as limited company and recently application has been passed." It took considerable thought to translate this into the fact that a limited company has been organized to operate a floating crematory in Tokio Bay.

**NEW LUMBER MILL, TOKYO.**—The Kinsei Lumber Mill has been registered as a partnership between Mr. N. Kaneko and C. Sato. The purpose of the partnership is to operate a lumber yard and saw-mill to be located at No. 2 Ogibashi-machi, Fukagawa-ku, Tokyo.

**NEW COTTON MILL.**—The Tsu Cotton Spinning Company, Ltd., has been registered with a capital of Y.2,500,000, divided into 50,000 shares of a par value of Y.50, of which Y.12.50 has been paid in. The object of the company is to operate a cotton

spinning mill at 45 Yokei-machi, Tsu City, Miye Prefecture. The Managing Director is M. Ota.

**NEW AUTOMOBILE AND TOOL COMPANY.**—The Nagoya Automobile and Industrial Company, Ltd., has been registered with a capital of Y.100,000 divided into 2,000 shares of Y.50, each of which Y.12.50 has been paid up. The objects are the manufacture and sale of automobiles (and their repair) and machine tools. The managing director is Mr. K. Kamiya; offices, 74 Higashi Yanagi-machi, Nishi-ku, Nagoya.

**HEMP MANUFACTURING COMPANY TO EXTEND.**—The Japan Hemp Manufacturing Company, Ltd. (Nippon Seima Kaisha, Ltd., address, Itchome Yurakucho, Kojimachi-ku, Tokyo) will issue bonds to the extent of Yen 5,000,000 for the purchase of materials and business extensions.

**FOOD TESTING LABORATORY, TOKYO.**—A food testing laboratory will be erected in Tokyo at a cost of Yen 280,000. A feature of the apparatus installed will be a Caloric meter costing \$10,000, made under the supervision of Dr. Benedict of the Carnegie Nourishment Testing Laboratory. It is understood that this will be one of five similar instruments in use throughout the world. The laboratory is part of a plan to improve the national physique by bettering the food of the people. It will be under the supervision of Dr. Saekiku.

**JAPANESE GOVERNMENT PRINTING PLANT WILL BE ENLARGED.**—In order to meet its increase of work since the late great war, the government printing bureau has decided to enlarge its printing office. For this purpose a two story building, covering some 500 *tsubo*, will be erected close by the present printing office. Thirteen new printing machines will be installed in the new building, and an increase of efficiency by some 50 per cent. is expected. Some portion of the convertible notes have hitherto had to be printed by hand work, but in future all the printing work will be done by means of machines.

**CIDER AND GRAPE JUICE WORKS.**—A new industrial company has been organized with Y.500,000 capital in Kuwamoto, Kyushu, for the manufacture of cider and other fruit beverages. The president of the new company is a Mr. K. Matsuda, who owns 76 per cent. of the shares of the company.

**NEW MACHINE COMPANY.**—Mr. H. Nogaya and others have organized a company with a capital of Y.1,250,000 in Sapporo, Hokkaido, for the manufacture of agricultural machinery and machine tools. The Tokyo branch is located at 57 Roku-buncho-Kojimachi-ku.

**NEW HEMP BAG COMPANY.**—The Japan Hemp Bag Manufacturing Company, Ltd., has been registered with a capital of Y.1,000,000, divided into 20,000 shares of Y.50 each, of which, the first installment of Y.12.50 has been paid up. The head office of the Company is located at 17 Yanagiwara, Kanda-ku, Tokyo, with branch at Isonomachi, Kobe, Managing Director, S. Susuki. The object of the company is the manufacture of hemp and cotton bags and similar lines.

**NEW MACHINE TOOL WORKS.**—The O. M. Metal Works Company has been registered at Tokyo for the purpose of engaging in the manufacture and sale of machines and machine tools. The company is a partnership to run for twenty years in which the following have paid in equal shares of Y.8,500 each: N. Miyamoto, Y. Tsumato and N. Obashi. The office of the company is at 75 Shimmeicho, Hongo-ku, Tokyo.

**TO SUBSIDIZE MOTOR MANUFACTURERS, JAPAN.**—At the coming session of the Diet, a bill will be

introduced for subsidizing all armament constructing industries. The construction and study of special armaments will remain under the supervision of the War Office and its industrial establishments, but the construction and experimental work on auxiliary materials required for national defense, such as motor engines, etc., for small sea craft and aeroplanes will be entrusted to private concerns. At present there is not a single factory for the construction of aeroplane engines, a grave defect in the national defense plans, in view of the paramount importance attaching to the utilization of aircraft. As part of the general policy of the government, it has been decided to entrust the construction of auxiliary armaments and materials that enter into the national defense to private concerns by means of government subsidies in the hope of ensuring complete industrial mobilization at a time of emergency.

**NITROGEN PLANT, JAPAN.**—It has been announced by the department of commerce and agriculture that the following changes in the *personnel* of the staff for the study of nitrogen fixation will take effect immediately:—

No. of engineers	13 instead of 7
No. of assistant engineers	15 instead of 7
No. of clerks	4 instead of 2

It is also reported that the government will spend over Y.55,000,000 for the enlargement of the present building and will also extend the scope of its work. Within a short while, a complete report of the investigations conducted so far will be issued.

**NEW INDUSTRIAL LABORATORY, KYOTO.**—The new Kyoto Industrial Laboratory was opened under the directorship of Mr. M. Tagami on October 1. The principal aim of the new institute is to undertake industrial and chemical experiments, research works and appraisals, on request. Books, apparatus and machinery will be rented to those applicants for the latter's study and experiments. Mr. Tagami is a graduate of the college of engineering of the Imperial University of Kyoto and is an experienced scientist.

**THE IMPERIAL MATCH COMPANY, JAPAN.**—The Imperial Match Company (an amalgamation of many small factories in Kobe) is reported to be in difficulties. Proposals are being made, either for the sale of the plants, or amalgamation with the Toyo Match Company. A formal proposal is expected to be made before long.

**NEW FERTILIZER WORKS, KOBE.**—Mr. Doi, Mr. Nishida and others have incorporated in Kobe, the Kobe Kogyo Kaisha with a capital of Yen 500,000 for erecting and operating a fertilizer factory.

**SPINNING WORKS NEARS COMPLETION.**—The new buildings at Yamabe of the Ashikaga Spinning Company, Ltd., capitalized at Yen 50,000,000 are nearing completion. The 300 looms are not expected to arrive before the end of October.

**NEW BREWERY FOR KOREA.**—Mr. K. Makoshi, the president, and Mr. Kondo, export manager of the Dai Nippon Brewery Company at the head of a party of experts have concluded their investigations for the establishment of a branch brewery in Korea. The yearly output of the Kirin, Sakura, and Kabuto breweries operated by this concern in Japan, is about 3,800,000 cases of which 300,000 are exported to Korea. The consumption of beer in Korea is increasing yearly at the rate of 20 per cent., so the need of a special plant to supply this market became necessary. The original plan was to establish the new plant at Ryuzan near Seoul, but this was discarded because of the danger of floods. The site has now been definitely fixed at Heijo (Pingyang), where, in addition to



its central location, the water is of the best quality for beer making. Land to the extent of 20,000 *tau-bo* has been acquired and a brewery with a capacity of 500,000 cases a year planned. The estimated cost is Yen 5,000,000.

**NEW PAPER MILL COMBINE, JAPAN.**—The Imai-zumi Paper Manufacturing Company and the Kaiso Pulp Company of Shidzuoka Prefecture have amalgamated under the name of the Oriental Paper Manufacturing Co., Ltd. The president and general manager is Mr. I. Kawada.

**NEW WOOLLEN MILL COMPLETED, AZUMA.**—The Nakamura Company of Tokyo has completed the erection of the Ninomiya Woollen Mill located at Azumamura, in Kanagawa Prefecture.

**TO ENLARGE WEAVING MILL.**—The Japan Hemp and Flax Weaving Company will issue a loan of Y.5,000,000 for the purpose of enlarging its plant.

**TIN FOIL INDUSTRY AT FOOCHOW.**—One of the most interesting native industries at Foochow, China, is the manufacture of tin foil, used in the making of joss paper. Pure tin or tin with a very slight alloy of lead is used in the manufacture. The tin is imported in the form of "pigs" brought

from Singapore through Hongkong. The tin is melted and molded into pieces  $2\frac{1}{2}$  inches square and  $\frac{1}{4}$  inch thick. Several layers of these are pounded together until the entire mass is reduced to a very thin sheet 18 inches square. Three-fourths of the tin foil manufactured at Foochow is consumed locally and the remaining fraction is exported through Shanghai and Hankow. In 1918 the exportations amounted to 140,000 pounds having a value of \$124,500, and in 1919 there was an increase to 198,000 pounds with a value of \$295,333. For the first quarter of 1920 the exports reached 55,000 pounds as against 50,000 pounds for the same period of the preceding year. The prevailing price is \$160 per picul of 133 $\frac{1}{3}$  pounds.

**NEW TSINGTAU CANNING FACTORY.**—Japanese merchants are organizing a large canning factory in Tsingtau. It is said that over \$5,000,000 capital has already been raised. The company intends to buy 200,000 cattle and buffaloes every year for slaughtering.

### COMMERCIAL

**JAPANESE EXPORT SYNDICATE.**—For the purpose of developing the foreign trade of Yokohama, a

syndicate will be organized by joint efforts of the authorities and exporters. A conference was recently held at which it was agreed to organize the Syndicate, one of whose objects would be to prevent the shipment of articles of inferior quality. The Syndicate will also give exporters all possible facilities as to monetary accommodation, the collection of samples, etc. The authorities have already dispatched several officials to Siberia and South Pacific countries to inspect markets and it is stated that they contemplate stationing officials at all important commercial centres abroad.

**BRITISH TANNERS' REPRESENTATIVE IN INDIA.**—The well-known English firm of tanners and manufacturers of leather goods—Messrs. Wm. Walker & Sons, Ltd., Bolton, have sent out their representative on a business journey to India, with a view to opening up agencies for their products. This firm (established over 100 years) holds a very high reputation for their speciality lines in sole leather, belting butts and manufactured leather belting of all kinds. Communications should be addressed to Messrs. Wm. Walker & Sons, Ltd., care of The British Consulate in Calcutta or Bombay and appointments can be arranged subsequently.

**PHILIPPINE PRODUCTION Co., LTD.**—Organized with a capital of Y.1,500,000, one-quarter paid-up, for the sale of Philippine products, etc. Office, Manami Sagaragi-cho, Kyobashi-ku, Tokyo. Managing Director, Mr. Konosuke Abe.

**YAMAGATAYA COMPANY, LTD.**—Organized with capital of Y.100,000 to conduct general freight forwarding and shipping agency. Office, 15 Shichome, Kaigan dori, Yokohama. Managing Director, Y. Kishino.

**DAIDO TRADING COMPANY.**—The Daido Trading Company, Limited, was organized on October 1, with a capital of Y.1,000,000, divided into Y.50 shares, all paid-up, to conduct a general export and import business. The head office is at 57-8 Naniwacho, Kobe, with branches at 198 Yokohama, and at London and New York. President, Mr. Kan Tanaka.

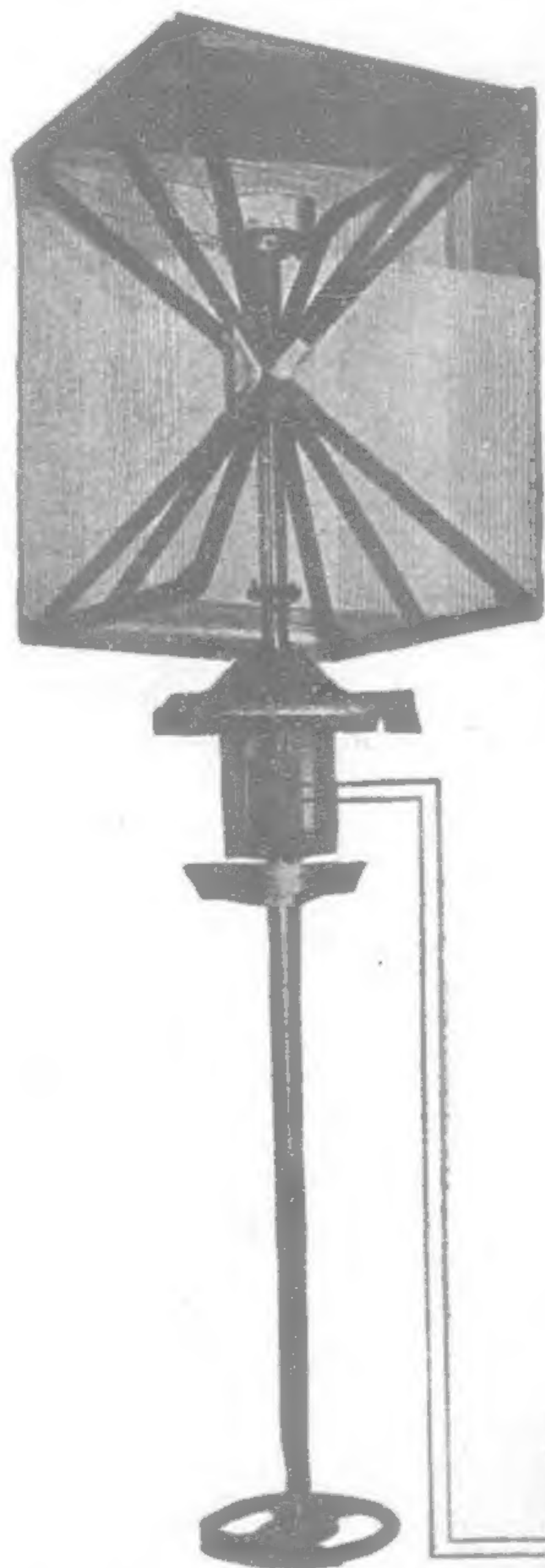
**NEW INSURANCE COMPANY, JAPAN.**—The Chitose Fire and Marine Reinsurance Company has been granted permission to start operations. The company will transact fire, marine and transit insurance.

**CATALOGS WANTED.**—The industrial and commerce department of the Osaka municipal government will open an exhibition of catalogs of manufacturers in all countries in the world. The purpose is to encourage the extension of trade, and help bring the home manufactured products up to a higher standard.

**THE FORMOSAN SUGAR CROP.**—The sugar crop of Formosa for this year which was previously estimated at 4,800,000 piculs, will according to the latest estimate be only between 3,800,000 and 4,000,000 piculs, as the weather has been unfavorable.

**CURTAILMENT OF COTTON GOODS.**—Mr. Y. Muto, managing director of the Kanegafuchi Cotton Mills, is strongly opposed to any further curtailment of work by spinners (it is now curtailed nearly 40 per cent.) on the ground that such a step would kill the export trade and at the same

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time almost irretrievably damage the home textile industry. The present measure of curtailment is helping to readjust the market satisfactorily, he says.

**INCREASE OF JAPANESE IMPORT DUTY ON SODA, ETC.**—The Japanese department of agriculture and commerce is investigating the question of increasing the import duty on iron, soda, zinc and potassium to protect domestic industries. The duty on carbolic acid and glycerine may also be similarly increased.

The demand for caustic soda in Japan has decreased considerably since last spring due to the economic depression. Prices have also been on the decline, being quoted at present at 7.5 sen per lb. Manufacturers find it impossible to dispose of their goods at such a low price due to the high cost of production. They have been cutting down their output since last spring. Some of them are now closing their factories. The following is the output during the first eight months of this year :

Months.	Output. lb.
January	2,162,498
February	2,019,192
March	2,156,571
April	1,843,236
May	1,811,301
June	1,711,495
July	1,463,474
August	1,508,974

**FROZEN AND DRIED EGGS FROM SHANGHAI.**—According to Consul-General Cunningham, Shanghai, the height of the egg production season for Shanghai is from April to the middle of July, during which time about 90 per cent. of the entire production is frozen or dried immediately upon arrival at the factories. During 1918, 2,301,165 pounds of frozen and 571,322 pounds of desiccated eggs were exported from Shanghai to the United States and in 1919 these amounts increased to 3,920,626 pounds of frozen and 3,948,406 pounds of desiccated eggs. Due to a limited amount of cold storage on vessels, there is some irregularity in shipments, but storage in Shanghai is said never to exceed 60 days.

**JAPANESE COMPANY IN MANILA.**—The Mematsusho Kaisha, Ltd., a Japanese firm with central offices in Tokyo, has been granted a permanent license to conduct business in the Philippines. A temporary license was issued to the Company in February, and it is understood that they will now engage in the import and export business on a large scale. Hemp will be the principal article of export, according to Mr. Kura, the manager of the local branch.

**CHINESE DELEGATES TO THE INTERNATIONAL SILK EXPOSITION.**—The four Chinese delegates to the International Silk Exposition to be held in New York commencing February 7, 1921, also three reeling girls and one mechanic, left Shanghai for the United States on the *Empress of Russia*, November 20. Two hundred cases of various specimens of Chinese silk products have been shipped to the exposition in advance in order to leave more time for their arrangement.

**AUSTRALIA'S WHEAT CROP.**—Australia's wheat crop, this year, is a record-breaking one. In view of this the farmers have been given the Commonwealth government's guarantee as to the

advance payment of five shillings per bushel from stations.

**NEW COMPANIES, OSAKA.**—The Osaka Chamber of Commerce reports the establishment of 21 new limited companies in Osaka, Higashi and Nishinari-gun during the month of September with an aggregate capitalization of Y.8,285,000, an increase over the preceding month of five companies and Y.770,000 in capitalization. During the same month 67 partnerships were registered with a capitalization of Y.6,551,600 an increase of Y.5,800,600 over the month of August.

**BOOKLETS ON THE IMPROVEMENT OF VEGETABLE OILS.**—The Chinese Chamber of Commerce, Shanghai, has issued booklets containing instructions for improving the quality and production of vegetable oil in China. The ministry of agriculture and commerce, Peking, have urged the wide distribution of these booklets.

**JAPANESE EXPOSITION FOR 1923.**—An international exhibition for 1923 is being planned by the Kyoto Chamber of Commerce, who are taking the matter up with the Osaka and Kobe Chambers of Commerce in order to secure their co-operation. It is suggested that Y.50,000,000 should be devoted to this purpose.

**ESTABLISHMENT OF CONSULATES URGED.**—The establishment of Chinese consulates at Jamaica and several other places in America, where Chinese residents are in need of official protection, has been recommended by the Chinese Charge d'Affaires at Washington, D.C., Mr. Yung Kwei. It is also reported that the Chinese government has issued instructions to the different ministers abroad to report on the number of newly-created trading ports in foreign countries, to which Chinese consuls may be sent.

**JAPAN'S TRADE WITH NORTH AMERICA.**—Japan's trade with North America for the first quarter of this year amounted to Y.201,824,000 in exports and Y.276,934,000 in imports, the balance being Y.75,110,000. Compared with the corresponding period of last year the figures show an increase of Y.114,343,060 in exports and of Y.102,744,000 in imports. The principal article for export was raw silk, while principal imports comprised raw cotton and iron.

**SOUTH PACIFIC ISLANDS TRADE.**—Consul Edward J. Norton at Sydney, N.S.W., in a dispatch to the department of commerce says: "Many industrial and commercial changes are occurring in the South Pacific Islands and their effects are bearing strongly on the trade relationship between the islands and Australia. The development of island trade is now progressing along new lines. Sydney is a collecting, not a consuming, port for copra; and this trade is turning from Australia and toward direct relations with the United States, Japan, France and England. The total annual production of copra in the South Pacific Islands is 56,000 to 71,000 tons. Australian consumption in recent years has only been about 10,000 tons per year. If Australia loses the copra trade it will lose also a large part of the present merchandise distributing trade. As the United States is a large consumer of copra and a producer of goods suitable for the island trade, direct trading relations should improve the American trade position throughout the South Seas."

**OSAKA IMPORTING CHINA EGGS.**—The agricultural department of the Osaka prefectural government has decided to import 10,000 eggs from

Tsingtao per day, at a price of five sen a piece, and if they are acceptable, the contract will be placed in the hands of the general agency of the city and prefecture.

**NEW TRADING COMPANY.**—Under the direction of Mr. S. Kageyawa, of Shidzuoka City the Shidzuoka Trading Company, Ltd., has been organized with a capital of Y.350,000. The company will engage in general import and export, including machinery and machine tools.

**AMERICAN GOODS IN INDO-CHINA.**—The opinion seems to be quite general, according to Consul Remillard of Saigon, that the lines of goods which were supplied by the United States to Indo-China during the last few years can continue to hold the market, provided that a direct means of shipment can be arranged for. As it is, merchants are unable to take advantage of the tariff rates allowed on the "minimum list for American goods," since it is only convenient to tranship goods at ports not entitled to such minimum rates or at some port of France. The establishment of an American bank in Saigon has also been suggested as a means to facilitate American business connections.

## EDUCATIONAL

**NEW SCHOOLS, YOKOSUKO.**—The municipality will erect several new school buildings during the coming year, at an estimated cost of Y.322,798.

**EDUCATIONAL MUSEUM.**—The Japanese department of education has included an item of Y.1,300,000 in its budget for the expenses of the establishment of an educational museum in Ueno Park. The exhibits will deal with the natural and applied sciences.

**EDUCATION IN MALAYA.**—The great advance in the aims and ideals of local education in Malaya during recent years was mentioned by the governor in his annual address before the Legislative Council. He said: Over two million dollars have been collected for Raffles' College. The constitution and nature of the College are under consideration. The recommendations of the committee appointed in 1919 to inquire into the financial position of all aided schools have been sanctioned and the new system of grants in aid has been introduced. The cost of the government is likely to be more than double what it has been hitherto, but the result should be greatly increased efficiency. Every effort will be made to educate the youth of this country to be useful and efficient members of a community which has special wants of its own.

**FRENCH TECHNICAL SCHOOL FOR CHINESE.**—With a contribution of two million francs from firms in France, financial assistance from the Peking government, twelve instructors from the leading French universities and modern French machinery *en route*, plans are being made for the opening shortly of a French School of Technology in Shanghai for Chinese students. Monsieur C. Maybon, former master of the French Municipal School, Shanghai, has returned from Paris, to become principal of the new school. The school of technology will be a preparatory institution and its graduates will be qualified to enter the Franco-Chinese University at Lyons. The faculty will consist of 12 specialists from France and 12 highly educated Chinese. The building to be used is the former German Medical and Engineering School (Deutsche Medizin und Ingenieurschule), on Rue Lafayette, which was taken over by the French authorities during the war.